

Statement of Ronald W. Nickle

Ronald W. Nickle

1.0 Statement & Declaration:

1.1. Declaration: I declare the following statement to be true and correct to the best of my knowledge and recollection, and so declare it under penalty of perjury (under the laws of the United States of America and the laws of the Commonwealth of Massachusetts). The statement is provided voluntarily and for the purpose of presenting my statement, declaration, contentions and assertions. No one has assisted me with this statement, other than for the purpose of proof reading and editing.

2.0 Personal information:

2.1 My name is Ronald W. Nickle, and I live at [REDACTED], MA 02190. I am 62 years of age, born March 12, 1957. I am married to [REDACTED]. I served as MBTA's Chief Safety Officer from September 12, 2011 to March 22, 2019, the day of my termination.

2.2 Education, Training, Qualifications and Professional Accreditations: I have extensive training, education, professional accreditation, and certifications in the areas of transit/transportation safety (FTA), railroad safety (FRA), workplace safety (OSHA), system safety engineering & management (System Safety), and safety management systems (SMS). I also have education and training in emergency management, system security, project management, risk management, and claims/insurance law (insurance, tort, contract, agency, evidence, damages, worker's compensation). I am a graduate from Brigham Young University, and the Insurance Institute of Canada. I also have training and qualifications as a train operator, train dispatcher, electro-mechanic, track safety standards, equipment failure & damage analysis, and aviation. I have extensive training and experience in investigation protocols, analysis, and reporting, having over 30 years of direct experience investigating accidents and throughout North America.

3.0 Federal Appointments:

3.1 USDOT Special Advisor: I am currently serving as a special advisor to the Federal Transit Administration, serving on the TRACS committee, having been appointed by USDOT Secretary

Chao. I receive no remuneration for my service, only reimbursement for certain travel and accommodations costs while performing my duties.

3.2 FTA Safety Standards Working Group Member: I also serve as working group member of FTA's Safety Standards Working Group, an assembly of transit industry experts that provides recommendations to the FTA.

3.3 Federal Safety Instructor: I serve as a federally trained and qualified Safety Instructor for the Transportation Safety Institute (TSI) a training arm of the FTA. TSI provides education, training, certificates and safety accreditation. I am assigned as an instructor to teach Safety Management System.

3.4 Improving Safety Culture in Transit: The Transit Research Board appointed me to serve as the Chairman on a TCRB research study "Improving Safety Culture in Transit", a \$500,000 grant to research and provide guidance to the transit industry.

4.0 Qualifiers:

4.1 The information within this statement is provided from my own detailed recollection and memory serving as MBTA's Chief Safety Officer ("CSO"), and without the aid of MBTA documentation¹ created in the course of my duties.

4.2 I also discussed many of the issues directly with Holly Durso - Director of Transportation Safety and Steven V. Culp, Director of Safety Engineering and others members of staff at the time or shortly after the event. When issues arose it was and is my practice to document safety activities, discussions and communications through emails, correspondence, agendas, minutes and other forms of documentation and Cc'ing such communications to members of my staff, management, regulators and legal, as applicable.

4.3 During the summer of 2018, General Manager Luis Ramirez contacted me by cell phone and directed me to limit and/or stop using written communication methods, and to rather meet in person, call or text so as to avoid public, media and regulatory scrutiny, after a news story where my emails had been provided to a newspaper and I had been misquoted. The GM's directive

¹ **Documentation:** In possession of MBTA, correspondence, letters, agendas, minutes, meeting notes, emails, calendars, hazard analysis, safety assessments, safety audits, inspections or other written information, on MBTA Safety's common drive, MBTA Industry Safe (software safety management data base) MBTA's email system, and other data and information systems.

seriously impacted and complicated my ability to communicate and document CSO safety activities, and made it even more difficult to communicate safety risks and perils to management and the GM.

4.4 GM Ramirez's position was also reiterated by Deputy General Manager (DGM) Jeff Gonneville, and by MBTA's new Chief of Environmental, Health and Safety Officer (CEHS), Nancy Prominski. These limitations caused a significant moral and personal dilemma for me as it compromised safety oversight, ethical, public and regulatory duties to document, communicate and track safety activities, hazards and risks, and in my opinion violated the principles of an effective safety program, public accountability, transparency, and disclosure.

4.5 Just before my termination I had issued a number of safety critical written communications in response to imminent, serious and critical safety hazards and risks, which I contend contributed to my termination due to negative reactions by management fearing regulatory intervention, public or media scrutiny. I had felt compelled and obligated to do so as I was unable to make contact with DGM Jeff Gonneville, and GM Steve Poftak, by phone, text, or meeting, as the safety risks were imminent, critical and posed unacceptable risks to passengers, employees, and the public.

4.6 The electronic documentation to support my assertions also confirms my performance, accomplishments and milestones of safety efforts as Chief Safety Officer and activities over 7 ½, along with my staff's invaluable dedication and service.

5.0 Preamble: The following section provides an overview, context, and general description of systemic and organization safety critical safety risks and perils:

5.1 I served as MBTA's Chief Safety Officer from September 12, 2011 to March 22, 2019. My authority and responsibilities extended to all modes of MBTA's legacy transportation (Highest US ridership rankings, 1st light rail, 4th heavy rail, 4th commuter rail, and 6th bus highest). System length 1,193 miles, moving 1.3 million passengers per day (weekday). MBTA's safety programs for transit light rail, transit heavy rail, bus, bus rapid transit, trolley, electric trolleybuses, commuter rail, paratransit, commuter ferry, construction safety, safety infrastructure engineering,

safety systems engineering, safety assurance, occupational health & safety (OSHA, DLS), contractor & vendor safety compliance, fire life safety, passenger safety, emergency and preparedness safety management, roadway work safety, right of way safety and public safety.

5.2 On March 22, 2019 at 9:00 AM, I was informed of my termination. The discharged occurred shortly after a meeting with the Peter Butler Acting FTA Regional Administrator, and Les Fiorenzo FRA Regional Administrator wherein we discussed GLX Project near misses, incidents, serious safety concerns, mitigation efforts and steps towards a corrective action plan.

5.3 The same week I had also met with the DPU Director Brian Cristy, and the Director of the Department of Labor Standards – Office of Occupational Health and Safety to discuss an employee electrocution and working together to develop a corrective action plan, as the matter came under FTA's safety program definitions. I was also actively handling a number of other safety critical incidents, concerns, good faith safety challenges and safety reports to my office of retaliation for reporting safety concerns.

5.4 I was told that I was terminated due to loss of confidence, and wanting to move in a different direction. I was not anticipating the termination as I had received no prior notice or direct indication of any failings or work performance issues verbally or in writing. My last performance evaluation was completed in 2014, and I received a positive evaluation and salary increase.

5.5 I provide this information of my termination to afford context, and the extent to which I believe efforts were exerted to undermine my authority, responsibilities, obligations, and duties as a Chief Safety Officer while actively dealing with major safety concerns on the GLX project, and serious violations of federal (FTA, FRA, OSHA) safety laws, rules and regulations.

5.6 While I was not informed of any specific failures or deficiencies in my work performance during my tenure as CSO, I have reasonably concluded, that through coercion and undue influence, led to direct encumbrances upon my ability to communicate, discuss, resolve, and or coordinate critical safety risks with MBTA's GM my direct report, and with state and federal regulators.

5.7 I also submit and assert that these coercive acts and encumbrances seriously undermined

MBTA's transit, commuter rail, occupational health and safety plan, and other safety programs,

I, Ronald W. Nickle, declare my statements are true and correct to the best of my knowledge. 5/1/2019 Page 4 of

thus increasing MBTA's commuter rail, transit, occupational health & safety, roadway worker

safety, construction safety and GLX Project hazards and risks to an unacceptable level.

5.8 I further assert that key and influential members of MBTA's management and DPU

management suppressed, conspired, curtailed, ignored and covered safety critical hazards of

known risks, and issues of non-compliance under investigation by the office of the Chief Safety

Officer in order to misrepresent safety hazards and risks to employees, state, federal regulators and the public.

5.9 When I was hired on September 12, 2011, after relocating from the Utah Transit Authority

to accept the position of MBTA's Chief Safety Officer, I reported to and was supervised directly by

the General Manager.

5.10 My interaction with the GM typically included one-on-one meetings held weekly;

joint meetings with senior executives; availability to contact the GM by phone, correspondence,

email, or texts at any time; and joint meetings with management and/or regulators to discuss safety

concerns, findings, hazards and other safety matters that required the GM's immediate attention,

review, direction, coordination and/or approval.

5.11 During my first four 4 years, I enjoyed tremendous support and protection, allowing the

office of the Chief Safety Officer, management and the workforce to achieve major improvements

in MBTA's safety programs.

5.12 I enjoyed earnest, open, successful, informative and regular exchanges with prior GM's

and acting GM's, comprising; Richard Davey, Jonathon Davis, Beverly Scott², Frank DePaola,

Luis Ramirez³ and Steve Poftak (acting), when he served for a short period of time as MBTA's

acting GM.

5.13 During Brian Shortsleeve's tenure as Chief Administrator and interim General Manager

from 2016 to 2017, I received an email that if I ever needed to talk to him over safety concerns I

² **Dr. Beverly Scott**, would meet less often, typically every 6 to 8 weeks, and was not as responsive to calls and reported safety risks. She worked more closely with Sean McCarthy and operations than with safety, but she did support a number of initiatives.

³ **Luis Ramirez**, I enjoyed regular and productive, but due to his limited knowledge of transit and railroad regulations, safety programs and my role as CSO he was not able to provide the same level of support, attention, direction and approval on serious transit or railroad safety issues. GM Ramirez did provide substantial support and direction in the development of the OHS program. I sensed tension between GM Ramirez and DGM Gonneville, as many times the GM would reverse decisions and direction particularly dealing with transportation safety issues.

I, Ronald W. Nickle, declare my statements are true and correct to the best of my knowledge. 5/1/2019 Page **5** of

could contact him directly. During his tenure as interim GM, he never met with me nor connected with me to discuss safety concerns.

5.14 In the course of GM's Shortsleeve's term, COO Gonneville was promoted to Deputy General Manager. I talked with Jeff, and informed him that within MBTA's safety program, the CSO is to report to the General Manager as an independent function from competing operational or project interests. I suggested given the roles of Administrator/AGM Shortsleeve and of DGM Gonneville that he declare himself as the accountable executive as he is more familiar with transit and rail issues. He told me he could not be the accountable executive as it was too risky and he did not have enough authority to take on the responsibility and accountability.

5.15 During this time period, DGM Gonneville rarely met with me, even though my staff scheduled meetings with him on a weekly basis. Most times the meetings were cancelled or he was not available. DGM Gonneville relied more on his management team to inform him, and seemed to prefer people he knew well and under his direct control.

5.16 With the announcement of GM Ramirez' dismissal I found myself under continued extreme duress as this was the 8th GM change since arriving 7 1/2 years ago, with 5 changes in the last 3 years. Such changes bring enormous organizational tension, instability and reticence, as the organization would undergo vast upheavals. These dramatic changes seriously impacted MBTA safety programs, creating systemic and organizational safety risks, and an increase in an inability to address safety critical hazards and risks. There was also an enormous transition and instability with senior management and executives coming and going, in an extremely, chaotic, unstable and confusing organizational environment.

5.17 Steve Poftak commenced his role as MBTA's General Manager on January 1, 2019. I was not able to meet with GM Poftak until 3 weeks into his tenure, which lasted ten (10) minutes, although I had a large number of safety concerns I needed to discuss with him. He confirmed that I would continue to be a direct report to him as CSO, and that the new Chief of Environmental, Health and Safety Officer would handle day to day duties. I rarely was able to meet with CEHS

Prominski as she worked more closely with DGM Gonneville. I tried to notify her of safety

concerns and she too rarely answered my texts, phone calls or emails, and took a one week vacation during the few weeks I worked with her. She confirmed in our first meeting that I was to continue to function as the CSO. From that day forward until my termination I did not have another one on one meeting with GM Poftak, nor did he answer my phone calls or texts, requests for meetings, or emails to discuss a number of transit, commuter rail, workplace safety or GLX project safety critical risks.

5.18 The role and interface of the GM and the CSO is safety critical and common practice in the transit industry, and expected by state and federal regulators. Regulatory agencies presume and anticipate the role of the Chief Safety Officer to be independent, autonomous from organizational competing interests, a direct report to the GM through ongoing (weekly) meetings, the ability to report and discuss safety concerns without fear of intended or inadvertent coercion, undue influence, retribution and/or retaliation from contending influences.

5.19 An integral part of the duties of the CSO, is a particularly important responsibility to communicate and interface with regulators and is MBTA's primary contact with federal, state and local regulators.

5.20 The primary onus, obligation and responsibility of the office of the CSO with regulators is to act in good faith and as part of an arm's length relationship to inform, discuss, negotiate, answer questions and ensure compliance with regulatory safety requirements concerning accidents, serious safety concerns, hazards, risks, near misses, close calls, and issues of noncompliance, regulatory violations, NTSB Safety Recommendations, FTA or FRA Safety Advisories, FRA Orders, FTA Safety Directives, DPU Orders, DLS Orders/Recommendations and other safety matters, guidance, recommendations or dictates, as applicable.

5.21 I contend that the action taken to terminate the CSO, will negatively affect the authority, responsibility, duty and obligation of the role of a new CSO, and has compromised the integrity of MBTA's safety programs.

5.22 I assert that MBTA represents a hostile, coercive and toxic work environment that is prone to offensive behavior, causing many workforce employees to feel uncomfortable, scared, or intimidated in their place of employment; not for petty slights, annoyances, misunderstandings or isolated incidents (unless serious), but a real sense of hostility, coercion and retaliation. The labor dynamic is overtly disciplinary, punitive, and an intimidating workplace. In the context of safety, employees working in this antagonistic environment did not feel safe to report health or safety concerns for fear of retribution. Creating a more positive safety culture, and working to create protections for employees was a key safety initiative I promoted for three (3) years, prior to my termination.

6.0 Tenure as CSO:

6.1 When I arrived at MBTA on September 12, 2011, I was astounded by the unacceptable condition and lack of performance of MBTA's safety programs, and the dismal state and/or lack of effective MBTA internal safety oversight processes typical of most transit and railroad systems.

6.2 Before coming to MBTA, I learned from a federal representative, whose company performed a triennial audit of MBTA on behalf of the FTA's Office of Safety & Security that MBTA's transit rail safety program and safety culture was in dire need of improvement, and that my task was going to be substantial, difficult and challenging.

6.3 I also determined that MBTA did not have safety programs for the commuter rail, bus, paratransit, ferry or an occupational health and safety program that followed regulatory guidance, or industry best practices (APTA).

6.4 In conducting field audits and interviews, I learned from workforce employees that the perception of the safety department was particularly negative; "safety violations meant termination". Safety violations were used to intimidate, threaten, employees, and to use it as a form of retribution or retaliation as a way to get rid of employees due to interpersonal conflict. I was also told by many sources that safety officials yelled and swore at employees for safety

infractions, and most MBTA's managers and employees were totally unaware of MBTA safety program plans, functions or processes.

6.5 To demonstrate the lack of support for safety department, I was not able order pens, pencils and other basic office supplies, as the budget was already exhausted and a new budget was not available for ten (10) months later, July 1st, 2012. My office was unusable as it was completely filled with boxes. Files and documents were all over the place, and a systematic order. It was obvious that the safety department function and capabilities was in a substandard state, dysfunctional, isolated from the organization and with minimal authority or influence.

6.6 I met with Director Brian Cristy from the Department of Public Utilities – Transportation Oversight Division (DPU), within the first week or so, we discussed in some detail the unsatisfactory state of MBTA's transit rail safety program. I also told him that the MBTA annual safety report was unorthodox and out of compliance with state and federal requirements, and industry best practices. He explained that he did not reject the annual report as the level of the safety department's competence was so low that it would have been fruitless for him to decertify the MBTA's safety program as they would not have had the ability to correct the problem. He also explained that is why MBTA recruited a CSO to help overhaul the safety program.

6.7 I thought this very unusual as DPU was one of the three (3) or four (4) state safety oversight agencies that had enforcement authority to issue orders, as most state safety oversight departments did not have similar authority. As I continued to deal with Director Cristy and the DPU over the past 7 ½ years I observed on many occasions where he compromised critical safety oversight aspects of DPU's regulation 220 CMR 151 and 49 CFR 659. Director Cristy preferred MBTA's investigation minimize, disregard, or subdue various, systemic or organizational safety hazard findings in order to limit the number of Corrective Plans (CAPS) he would have to track and report to the FTA.

6.8 Before coming to MBTA, I had worked with Ana Berry on a committee in Washington DC.

Ana was employed as one of MBTA's as a senior executive. I ran into her my first few days, and she warned me as to the toxic nature of the organization, saying that it was doubtful I would

survive a year or two, as management tends to be highly suspicious of outsiders, and I would be lucky if I lasted more than a couple years. She also warned me of the managerial instability, secrecy, coercion and retaliation as a rampant organizational dynamic, and that executives come and go through a revolving door. Ana Berry currently works for the Connecticut Department of Transportation as Deputy Commissioner.

6.9 It is crucial and vital that the role and function of the CSO be an independent function from other departments, reporting directly to the GM. Without a strong support system from the GM, it is very challenging if not impossible to make the positive changes necessary to transform MBTA's safety programs, especially in light of the MBTA's deleterious and punitive culture. The CSO requires protection and autonomy to counter the powerful forces, silos, and self-preserving undercurrents of a landscape of toxicity, instability and ever changing dynamics due to high levels of management turnover and instability. During my time at MBTA it was not uncommon for management to ignore, threaten, yell at, intimidate or belittle me personally in my role of the CSO, in order to undermine my authority, responsibility and obligations.

6.10 I declare that I have to the best of my experience, knowledge, vigor and ability performed the obligations and duties of the office of the CSO.

7.0 MBTA Safety Salary Disparity

7.1 In 2016 to 2019, operations and capital delivery department executives were appointed to new titles and received substantial salary increases. As a result, MBTA Safety's salaries became less competitive, and a number of my staff sought other more lucrative and less demanding opportunities with other departments or companies.

7.2 These included Tim Davis, Deputy Director of Transportation to supervisor (\$89K to \$115K), Tammy Powell Director of Transportation Safety (\$115K to \$200K), James Joseph and Jeffery Young Infrastructure Engineering - Safety Specialists to resident engineer (\$86K to \$105K), Kevin Reilly, Safety Audit Coordinator (\$68K to \$120K+), Alex Metzger Deputy Director of Systems Safety Engineering to vehicle engineering (\$98K to \$105K), Holly Durso

(\$115K to \$130K+). The turnover seriously impacted the office of the CSO by increasing

workloads, reduced staff, loss of experience, and increased training costs.

7.3 I forwarded numerous memorandums to the GM and CFO, trying to obtain increases for my staff, and was unsuccessful. The salary disparity caused a major impact on my office, as safety specialist salaries encroached on Assistant Director and Deputy Director salaries. Although, I discussed these concerns with HR, CFO's GM's and other executives I was not able to rectify the inequality.

8.0 Workforce Reductions

8.1 When I first arrived, the office staff totaled 19 employees. AGM Davis authorized 11 additional staff members to support our efforts, goals and objectives. Based on GM's Davis' authorization MBTA Safety added personnel to perform the many functions of transit, commuter rail, bus, paratransit, commuter ferry, safety engineering, OHS workplace safety and other safety programs.

8.2 During the years of 2016 to 2017, MBTA Safety's headcount was reduced from 30 employees to 25. I submitted multiple emails to the CFO Mike Abramo, Administrator Shortsleeve and DGM Gonneville, as to the dangers of reducing MBTA Safety's headcount for a number of reasons without success. The following represent the concerns expressed:

8.2.1 MBTA Safety's headcount is dramatically lower than other comparable transits, and

MBTA's multi-modal legacy system is considerably more complex.

8.2.2 The Governor and Secretary of MassDOT announced rapid increases in capital

infrastructure, rolling stock and systems projects. MBTA Safety Engineering

workloads increased six (6) fold⁴.

8.2.3 Development and implementation of the Occupational, Health and Safety initiative to adopt Federal OSHA Standards, and the General Duty Clause.

8.2.4 Development and implementation of MBTA's safety plan (PTASP), in accordance with 49 CFR 673.

4 Staff Reductions: The safety engineering staff was reduced to one director, two deputy directors, two safety specialists, and two safety analysts to provide safety oversight over 120 infrastructure projects, 20 rolling stock/systems projects, technical investigations, state of good analysis and other safety engineering projects.

- 8.2.5 Development and implementation of MBTA's commuter rail safety plan in accordance with APTA and 49 CFR 270.
- 8.2.6 Development and implementation of MBTA bus safety program
- 8.2.7 Green Line Extension Project
- 8.2.8 Commuter rail Positive Train Control Project
- 8.2.9 Replacement and/or overhaul of Orange/Red/Green line trains, buses, commuter ferries, commuter locomotives/coaches/cabs, and other equipment
- 8.2.10 State of good repair capital expenditure program

9.0 Termination:

9.1 On Friday March 22, 2019 I was informed of my termination, due to management's loss of confidence in my performance, and wanting to move in a different direction. I was not anticipating the termination as I had received no prior notice of any failings or work performance issues verbally or in writing. When asked if I could work in some other capacity they stated that they had considered some other positions, but none were readily available.

9.2 I suspected based on their comments that much of the concern related to my role interacting with regulators, performing independent investigations/assessments, and my tendency to document safety activities, including issuing safety communications such as emails, letters, inspection reports, safety advisories, safety directives, corrective action notifications, safety stand-downs, and other efforts. I had experienced increasing levels interference and criticism in performing safety activities over an extended period of time, and increasing forms of ostracism, isolation from key executives I was accustomed to working with, negative insinuation and an inability to meet with and inform the GM and DGM to discuss safety issues, investigations, hazards, risk mitigation, safety improvements, and the development and implementation of corrective action plans.

10.0 Federal Safety Laws, Rules & Regulations

10.1 I assert, that such acts were committed during and in the direct performance of my role as Chief Safety Officer's in performance under federal & state safety programs and federal capital grant funded projects (FTA), as prescribed by federal laws, regulations, rules, guidance, circulars, industry standards, federal expectations and transit industry best practices (APTA), as follows:

- 10.1.1 H.R. 4348 - MAP-21 Moving Ahead for Progress in the 21st Century Act
- 10.1.2 Federal Transit Laws Title 49 USC Chapter 53
- 10.1.3 49 USC § 5329 - FTA Safety Program
- 10.1.4 49 USC § 5337 - State of Good Repair
- 10.1.5 49 USC § 5326 - Asset Management
- 10.1.6 49 USC § 5339 - Bus and Bus Facilities Program
- 10.1.7 49 USC § 5324 - Emergency Relief
- 10.1.8 H.R. 22- FAST Act – Fixing America’s Surface Transportation Act
- 10.1.9 49 CFR 625 & 630 - Transit Asset Management-National Transit Database
- 10.1.10 49 CFR 659 - Rail Fixed Guideway Systems; State Safety Oversight
- 10.1.11 49 CFR 672 - Public Transportation Safety Certification Training Program
- 10.1.12 49 CFR 673 - Public Transportation Agency Safety Plan
- 10.1.13 49 CFR 674 - State Safety Oversight

- 10.1.14 49 CFR Chap. II – Federal Railroad Administration(FRA) - 200 to 299, et al

- 10.1.15 40 CFR 214 Railroad Workplace Safety

- 10.1.16 29 CFR 1910 Subparts A to Z - General Industry Safety Standards

- 10.1.17 29 CFR 1926 Subparts A to CC – Construction Safety Standards
- 10.1.18 29 U.S.C. § 654 (a) General Duty Clause
- 10.1.19 Other federal regulations, circulars, orders, directives, advisories, guidance,

instruction, and expectations, as applicable.

10.2 The Chief Safety Officer’s authority and responsibilities is articulated through MBTA’s approved safety plans⁵, following federal, and state regulations, and industry best practices (APTA).

10.3 The office of the Chief Safety Officer performs safety functions, investigations, hazard management, analyzes safety risks⁶, inspections, reviews, audits and other safety activities in accordance with MBTA’s approved safety plans. Much of the regulatory safety oversight is therefore focused on MBTA’s compliance with its own safety program, and specific activities defined by MBTA’s approved safety plans, FTA regulations and DPU Program Standards; specifically notification, investigations, reporting, hazard management, safety audits, annual reports and other defined aspects in the Program Standard and federal regulations.

5 MBTA transit safety plans 220 CMR 151 “System Safety Program Plan (SSPP). A document developed and approved by the rail transit agency, describing its safety policies, objectives, responsibilities, and procedures. Until one year after the effective date of 49 CFR Part 673, Public Transportation Agency Safety Plans, the SSPP developed pursuant to 49 CFR 659.”DPU Regulation 220 CMR 151

6“Safety Risk Management. A process within Rail Transit Agency’s Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risks.” DPU Regulation 220 CMR 151

10.4 The role of the Chief Safety Officer is charged with ensuring MBTA's compliance with the MBTA's safety plan and approved and accepted by state (DPU, DLS) and federal regulators (FTA, FRA, OSHA).

11.0 FTA – Office of Safety & Oversight (Washington, D.C.)

11.1 The FTA is segmented into separate and distinct functions and responsibilities. The FTA Office of Safety & Oversight located in Washington DC, oversees and enforces a number of safety program aspects as defined by the aforementioned regulations.

11.2 Transit Safety & Oversight oversees and regulates the DPU, who in turn regulates MBTA, under the regulations cited earlier. In the role of the Chief Safety Officer, I am responsible, obligated and charged with ensuring compliance and concurrence with FTA's regulations, circulars, guidance, advisories, directives, instruction, industry safety standards (APTA) and NTSB safety recommendations.

12.0 FTA – Regional Office

12.1 FTA's regional offices serve a separate and distinct function from the FTA Office of Safety & Oversight, who works with local transit agencies in development, processing and oversight grant applications and recipients at the local level, and supporting other FTA or federal functions such as the Program Oversight, Office of Safety & Oversight, Civil Rights/ADA, and Transit Asset Management, and compliance with local, state and federal regulations (FRA, OSHA), rules and law.

12.2 The regional office Region 1, Peter Butler serves as the Acting Region 1 Administrator. MBTA's CSO work with national and local FTA representatives, as called upon and in response to specific projects, requests, queries and or concerns.

12.3 I assert that in the course of my CSO duties and discussions with the FTA regional office in the matter of serious safety concerns on the GLX project, and expressed concerns by the acting regional administrator for other federally funded GLX project that I was terminated. The action to terminate the CSO during the course of an active investigation places the GLX project and other federally funded projects in substantial risk to public safety.

13.0 Federal Railroad Administration (FRA)

13.1 The Federal Railroad Administration (FRA), promulgates and enforces railroad safety regulations (49 CFR 200 to 300), administers railroad safety programs (i.e. Close Call Confidential Reporting System - C3RS), research & development, and the national rail transportation policy. MBTA's commuter rail system falls under FRA regulatory safety oversight and enforcement.

13.2 MBTA is the Railroad of Record, and as such my CSO duties and activities qualify me as a railroad employee, and I am included in FRA's Drug & Alcohol testing pool, and subject to random testing under it program, in accordance with 49 CFR 219 – Control of Alcohol and Drug Use.

13.3 MBTA commuter rail projects that receive federal (FTA) grant funds are administered by the FTA, with expectations that the recipients will follow all Federal, state, and local regulatory requirement, including the FRA regulations on commuter rail projects, or transit projects that work adjacent to or on commuter rail projects.

13.4 An example of this scenario is the Green Line Extension Project. This requires MBTA Chief Safety Officer to coordinate with and oversee safety compliance with FTA, FRA, state regulations and requirements.

13.5 Additionally, as MBTA's Chief Safety Officer I served as the CSO of the MBTA commuter rail system, with authority, responsibility, obligation to oversee safety of the commuter rail system.

13.6 MBTA promulgated its commuter rail safety plan, defining the safety program and the role of MBTA's Chief Safety Officer, as submitted and accepted by the FRA. The CSO worked daily with MBTA's commuter rail contractor, Keolis, and with local and national FRA representatives in duties specific to the safety of the commuter rail system. Les Fiorenzo, serves as FRA Region 1 Administrator.

13.7 I assert and am willing to further testify that I was terminated during the course of an active investigation and efforts to mitigate serious safety concerns to roadway worker employees under 49 CFR 214 Railroad Workplace Safety program, and OSHA safety regulations. The outcomes of the termination of the CSO during the course and duty of his safety oversight function poses a risk to roadway workers and the public.

14.0 Chief Safety Officer's Role

14.1 The office of the Chief Safety Officer is the safety oversight authority and responsibility, as defined within MBTA's approved transit rail, bus, commuter rail safety plan, and OHS safety plans, and all programs, plans, policies, rules, procedures, manuals and other documents connected to MBTA's safety program. MBTA's safety plans have been approved and signed by the GM, with concurrence from senior management, and endorse by MBTA's Board. .

14.2 The office of the Chief Safety Officer, independently investigates, identifies and analyses safety hazards⁷ and risks, works with management and employees to mitigate and correct hazards and risks to acceptable levels of risk, inspects, audits and performs a myriad of other safety activities to determine viable safety risks and compliance with MBTA's safety program, and in accordance with regulations, circulars, and transit industry best practice.

14.3 **Duties of CSO:** Within MBTA safety plans and policies, the CSO has specific duties, stated as follows:

"When an immediate and serious safety critical hazard exists, the CSO has the authority and responsibility to order hazardous conditions corrected to acceptable levels.

*Accordingly, the CSO is empowered to order the cessation of unsafe activities, operations that are evaluated as creating immediate and serious safety critical hazards within the system. The CSO is authorized to conduct mandatory internal safety reviews to determine compliance with the MBTA Safety Plan. The CSO may also perform announced or unannounced audits, review, inspections, or assessments for the purpose of identifying and eliminating unsafe practices, operations, or conditions not immediately corrected by MBTA management"*⁸

⁷ **"Hazard.** Any real or potential condition that can cause injury, illness or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure or a rail fixed guideway public transportation system, or damage to the environment." DPU Regulation 220 CMR 151

⁸ **2018 MBTA Occupational Health & Safety Plan** signed by the GM, approved by the Safety Management Executive Review Committee, OHS Steering Committee and endorsed by MBTA's Board of Directors. Similar language appears in 2019 MBTA's Rail Safety Plan, and other safety plans (bus, paratransit, commuter rail, and commuter ferry).

14.4 Safety Committees: The customary MBTA Safety approach is to work collaboratively with the GM, management, employees, stakeholders, passengers, public and regulators, individually, in meetings and through organized MBTA's Safety Management Executive Review Committee (SMRC), Working Groups (SMWG), Task Teams and safety committees to discuss and resolved safety issues. This meetings are held regularly and the agenda, minutes and actions items are recorded and retained by the safety department. MBTA Safety also documents its safety activities, which is subject to state, federal, internal and external safety audits. The office of the CSO also notifies, investigates and reports safety hazards, risks, and other safety concerns to and is legally, lawfully obligated and is subject to state or federal safety and notification regulations and rules, and laws. The role of the CSO is a regulated expectation and common practice in the transit and railroad industry, and is a well-established independent function reporting directly to the GM, with protection from competing interests, coercion, undue influence, retribution or retaliation.

14.5 Communicating with Regulators: In addition, I assert that MBTA's Chief Safety Officer has specific federal and state responsibilities, obligations and is compelled to openly and directly notify, inform, and discuss safety concerns, issues, hazards, risks, issues of noncompliance, incidents, accidents, near misses, close calls, audit/inspection/observation findings, answer questions or cooperate in any measure with federal and or state administrators, officials, inspectors, investigators or representatives, with full and complete disclosure and without filtering, limiting, withholding, or suppressing information or perjuring oneself. MBTA's safety plans state the following:

"The CSO is the Authority's primary point of contact with the federal, state and local regulators as well as industry professional organizations. With assistance of MBTA Safety Department staff, the CSO works jointly with the GM, management, employees, contractors, and the general public to advance all aspects of transit safety."

14.6 Federal Safety Programs: Additionally, as MBTA receives Federal funding, which predisposes Federal oversight and or the application of regulations, circulars, requirements and guidance, which direct and advise the function of the Chief Safety Officer as defined by clearly defined expectations, responsibilities, obligations and accountabilities, FTA approved and certified state safety oversight program and other standards. These responsibilities and obligations hold the CSO accountable to Federal and State oversight, laws and regulations which prohibit the CSO from knowingly or willfully making any material false, fictitious or fraudulent statement or representation in any matter within the jurisdiction of the executive, legislative or judicial branch of the United States. , or committing perjury, or withholding information not otherwise protected, upon request, questioning, interview, inspection, audit or review.

14.7 Critical Function of CSO: I assert that the role of Chief Safety Officer constitutes a key, integral, recognized and critical safety oversight function and is viewed by the FTA, FRA, OSHA, DLS and other regulators; with recognized authority, responsibility, obligation, accountability, duty, and autonomy, as prescribed by federal, state requirements and MBTA's safety plan, and is empowered, compelled and vested to determine MBTA's compliance, performance and adherence with Federal, state and MBTA's safety plan requirements, regulations, safety standards, industry best practices and to discuss, collaborate with and or to take the action necessary to ensure safety compliance, and the health and safety of passengers, employees, contractors, EMS responders, and public. (5 U.S.C 2302(b) (8)-(9), Pub. L. 101-12 as amended).

15.0 State Safety Oversight Provisions:

15.1 The office of the Chief Safety Officer has authority, responsibilities and obligations under specific Massachusetts state regulations, and requirements stipulated in 220 CMR 151 Rail Fixed Guideway System: System Safety Program Standard, M.G.L. Part I, Title XXI Chapter 149 §6 ½, Protection of Public Employees consistent with federal Occupational Safety and Health Act, and OSHA 29 CFR 1910, 1926 and the General Duty Clause for contractor employees. There exists

regulatory overlap of these state agencies, requiring coordination between them in the area of workplace protection of employees.

15.1.1 Department of Public Utilities – State Safety Oversight Agency (DPU),

is a federally constituted State Safety Oversight Agency Program Standard (Program Standard) administered by the Department of Public Utilities – Transportation Oversight Division (DPU) to regulate MBTA, in accordance with the federal requirements of 49 CFR 659 and 49 CFR 674. DPU’s Program Standard has been reviewed, approved, certified and accepted by the FTA, Transit Safety & Oversight (Washington, D.C.), and DPU receives federal grant funding (approx. \$1.2 million) to operate its Program Standard. Director Brian Cristy and his Assistant Director Scott Andrews manage and oversee DPU’s Program Standard.

15.1.2 MA Department of Labor Standards – Workplace Safety & Health

Program (DLS), is the agency that oversee MBTA and other public state employees. As of February, 2019, with amended provisions signed into Massachusetts law March 9, 2019, MBTA is required to comply with Federal OSHA Safety regulations, and the General Duty Clause. For the past three years, the office of the Chief Safety Officer has been working with the DLS on a voluntary basis to develop and implement a complaint workplace safety program.

15.1.3 OSHA – US Department of Labor, provides work place safety oversight for private sector employees, such as MBTA contractors, consultants, service providers, and vendors.

15.1.4 Green Line Extension Project (GLX Project): MBTA’s safety plan complies with state and federal requirements, qualifying MBTA for federal grant funding programs (FTA), including the \$996.4 million FFGA for the GLX Project with endorsement by U.S. Secretary of Transportation, Elaine L. Chao. The CSO and staff has a direct safety oversight role of the GLX project, in the areas of design & engineering safety review, construction safety, safety certification, hazard & risk

analysis, safety assurance, roadway worker safety, and management of change of safety critical. The GLX project involves the following regulatory safety oversight agencies, FTA, DPU, FRA, OSHA, and DLS.

16.0 Green Line Extension Project Safety Critical Risks:

16.1 GLX Project Description

- 16.1.1** MBTA's Green Line Extension Project (GLX project) involves the extension of MBTA's light rail system into two branches, consisting of 6 new stations, relocating one station, vehicle maintenance facility, and relocating commuter rail track (New Hampshire and Fitchburg lines) for opening June 29, 2021.
- 16.1.2** GLX Constructors, a joint venture comprises Flour Enterprises Inc. (design-build contractor), Herzog Contracting Corp. (rail construction contractor), Middlesex Corporation (rail construction contractor), Balfour Beatty Infrastructure (rail construction contractor), and STV Inc. (lead designer).
- 16.1.3** On January 5, 2015 MBTA and the FTA entered into a Full Funding Grant Agreement (FFGA), with the federal government funding \$996.12 million under Section 5309 New Starts, of the \$2.28 billion dollar project. The US Congress appropriated \$400.00 million in total funds through FY 2017 for the GLX Project.
- 16.1.4** MBTA executed 20% of the construction project, but cancelled many of the contracts due to projected cost overruns of an additional one billion dollars. This created delays in the project moving forward as MBTA sought new project managers and new contracts to compete the project. Although the project suffered from the delays, the project deadline is expected to be close to the same.
- 16.1.5** GLX Constructors entered a contract with MBTA in the later part of 2017 or early 2018, and commenced construction activities in April 2018. Due to the delays in the project without changing the project deadline date from a safety analysis purpose, exposes the GLX project to greater safety risk due to an aggressive timeline unless strict measures of project safety are instituted and followed.
- 16.1.6** John Dalton, MBTA GLX Project Manager has been designated by MBTA

to oversee the GLX Project, and reports directly to the General Manager. Project

Manager Dalton is an accomplished project manager, however has limited or no prior experience with FTA New Start major capital projects and the roles, responsibilities and obligations of the FTA Office of Safety & Oversight, FTA Region, FRA national, FRA region, and the DPU – SSOA. He did however, express an interest to learn more, and worked with me to understand the regulatory and MBTA safety programs dynamics. Although, Project Manager Dalton as GLX project manager met with GM Ramirez and GM Poftak, I was not able meet with or discuss the GLX project, nor to inform them of the safety concerns, hazards or risks.

16.1.7 Project Manager Dalton's safety team lack experience and qualifications to effectively oversee several aspects of RWP Safety, safety assurance, and safety certification, and their experience was principally with construction safety.

16.1.8 Additionally, the GLX Project is challenging due to the limited room within the corridor construction activities will be performed, and the proximity to the commuter rail system, neighborhoods, businesses, utilities, and other potential risk sources.

16.1.9 The high number of incidents within such a short time frame suggests apparent safety management weaknesses, failures and impediments in communication, management, control, and processes in assuring safety by GLX Constructors. At the time of my termination the project was gearing up for significant increased construction activities with the added challenges and complexities from overlapping construction activities under a tight time schedule, which leads to higher safety risks factors unless strong safety measures are in place.

16.1.10 History is replete with examples of incidents occurring when project deadlines supersede safety. Safety involves not only safety risks to employees, passengers and the public, but also potential project latent or hidden safety defects, in terms of safety critical elements, systems, and subsystems. This includes flaws, omissions or errors in safety planning, safety design, safety specifications, safety

engineering, safety assurance (QA/QC), safety verification/validation, safety inspections, and so forth. An example is the Big Dig project where the contractor failed in its duty to ensure a safely designed, engineered, built and certified project, where a defective panel later fell and killed a female motorist.

16.1.11 Based on my seven and a half years at MBTA, I have personally observed, determined and found numerous instances of latent or hidden construction and manufacturing safety defects, omission, failures or errors in design, engineering, construction, assembly, hardware, software and manufacturing systems leading to safety critical hazards, events and mishaps. As such, as MBTA's CSO, I helped develop and implement a number of safety assurance, verification and validation processes to help ensure safety, as part of the MBTA Safety oversight of capital projects and acquisitions. GLX Constructors is the principle contractor to ensure and implement safety in accordance with the agreement, MBTA safety requirements and industry best practices.

17.0 GLX Constructors Safety Performance Requirements

The following sections describe in brief a number of GLX Constructors safety critical performance, assurance and responsibility requirements.

17.1 GLX Design Build Contract Terms and Conditions No. E22CN07, Vol. 1, states:

17.1.1 Section 2.5.1.1 Limitations of Operations: Rail Corridor

“DB Entity [GLX Constructors] shall perform all Work in accordance with the Commuter Rail Operator’s Roadway Protection Manual and other applicable provisions of the Contract Documents.”

17.1.2 Section 9.2 Supervision & Construction Procedures:

§ 9.2.1: “....shall be solely responsible for, and have control over, construction, quality, means, methods, technique, sequences, procedures, and Site safety and for

coordinating all portions of the Work under the Contract Documents, subject, however, to all requirements contained in the Contract Documents.”

§ 9.2.3: “In completing the Work, DB Entity acknowledges that safety is a principal goal of the Project, that the Project shall be completed with that goal in mind and that completing the construction of the Work in a safety and efficient manner is DB Entity’s responsibility.”

17.1.3 Section 9.4 Safety Requirements

§ 9.4.1: “...shall be solely responsible for implementing, maintaining and supervising the Safety Management Plan. DB Entity shall take all reasonable precautions and be solely responsible for the safety of, and shall provide protection to prevent damage, injury or loss to: (a) all employees of DB entity and its Subcontractors performing the Work and other persons who are on Site or would be reasonably expected to be affected by the Work; (b) the Work and materials and equipment to be used for or incorporated therein; (c) all other property on, adjacent to, or near the Site. DB Entity shall not perform the Work at any time when conditions are unsuitable for its execution, safety, and permanence. DB Entity shall comply with all health and safety Laws.

§ 9.4.2: “DB Entity and any Subcontractors shall not require any person employed in the performance of the Work to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to health or safety, as determined under applicable health and safety Laws.”

17.2 GLX Constructors Technical Proposal (GV20170258-110.INDD) GLX Constructors proposed a number of safety specific assurances, representations and certifications as follows:

- **Management Approach (Part 1 pg.7):** *“During the preparation of our Statement of Qualifications and as part of our proposal development, GLX Constructors has built an experienced Project Team based on the needs of the Project. Our team was assembled with the express goal of developing a Management Approach to incorporate the initial design of the Project with how the Project will be constructed and commissioned. Our construction-driven approach drives our collaborative team integration, providing the MBTA with a fully integrated Project Team to deliver cost and schedule certainty.”*
- *“Our construction-driven approach to Project Management begins during the Design Phase of the Project and integrates safety, quality, construction, and commissioning in the heart of the Project.” (Pg. 1-7)*
- **Safety, Security and Emergency Management – Part 1:** *“GLX Constructors will further assess the Project’s requirements and develop a Safety, Security, and Emergency Management Plan. We will provide the MBTA with a fully compliant program that comprises safety, security, and emergency elements for protecting both the MBTA’s operations, workforce, and the commuting public during day-to-day public use once the Project is successfully completed. Our Team has extensive startup, commissioning testing, and systems certification experience, and we apply our best practices during the Design and Construction Phases for systems testing and commissioning, facilitating an effective Project start up and reduced costs along the way.”(Pg. 1-10)*
- **Design Management Concept (Part 3.1B):** *“Through our commitment to providing excellent design staff to the MBTA, STV and GLX Constructors’ design concept will provide the MBTA with the resources necessary to efficiently complete the Project from design through safety certifications, revenue operations, and closeout.” (pg. 3-20) “... each Design Package will be assigned to one of the Design Discipline Leads’*

responsibilities to confirm that the work is performed in accordance with both the

Contract, and the Safety and Quality Management Plans.”(3-24)

- **Construction Management Concept (Part 3.1.C):** *“Our construction-driven*

execution approach begins with incorporating safety into the start of any process or

procedure. Our commitment to safety is paramount, and it will not be sacrificed for

cost or productivity. It is appropriate to present our commitment to Safety as the first

and primary step in our Project Management Plan... (pg. 3-29)

- *“GLX Constructors’ first priority is safe and secure into the start of any process or*

procedure...” (pg. 3-29)

- *“GLX Constructors’ first priority is safety and secure Project execution.”(pg. 3-29)*

- *“GLX Constructor’s commitment is based on the principles that accidents are*

preventable and risks will be controlled to a level that is as low as practical.” (pg. 3-

30)

- *“Safety will not be sacrificed for the sake of cost saving or increased productivity.”*

(pg. 3-30)

17.3 Safety, Security, and Emergency Management Plan (Part 3.3):

17.3.1 GLX Constructor assert and promise a considerable number of assurances,

representations and certifications in compliance with FTA Circular 5800.1, 49 CFR

659, 220 CMR 151, MBTA safety plans (SSPP), and other laws, rules, regulations

and industry best practices. The following provide highlights from the Technical

Proposal document:

- *“GLX Constructors believes in safety first. Similar to our workforce Health,*

Safety and Environmental (HSE) Plan... we will approach the Safety, Security,

and Emergency Management Plan requirements with the same goal: build and

commission a transit system that operates with the safety of MBTA’s workforce

and the traveling public as the most critical aspect of this Project.” (pg. 3-61)

- *“GLX Constructors will implement a robust Safety, Security, and Emergency*

Management Plan early on in the Project. Our strategy will be to develop a plan

that is in accordance with MBTA’s System Safety Program Plan (SSPP) [MBTA

safety plans] and FTA's guidance, rules, and regulations, such as the State Safety Oversight of Rail Fixed Guideway System...GLX Constructors will develop our own Safety, Security, and Emergency Management Plan that is specific to the scope of the Green Line Extension DB Project.” (pg. 3-63)

- *“Safety and security related requirements are incorporated in all phases of the project, such as planning, design, construction, installation, testing commissioning, and start phases.”(pg. 3-63)*
- *“Hazard associated with the Project are identified, and then eliminated or controlled, to obtain an acceptable level of safety through development of a Preliminary Hazard Analysis.” (pg. 3-63)*
- *“GLX Constructors will develop a Preliminary Hazard Analysis (PHA) during the early phases of design development that may provide input to be used in the refinement of the Certifiable Elements List (CEL) and Certified Items List (CIL), safety and security design criteria, and overall project design.” (pg. 3-67)*
- *“We will develop a Project-specific Safety and Security Certification Plan (SSCP) that aligns with the MBTA's SSCP, as well as the process identified in FTA requirements under Code of Federal Regulations (CFR) 49 CFR 633 “Project Management Oversight”; Part 659 “Rail Fixed Guideway Systems and State Safety Oversight”; and FTA's Project and Construction Management Guidelines’, which identifies FTA Circular 5800.1 “Safety and Security Management Guidance for Major Capital Projects”. (pg. 3-69)*

17.4 Other Assurances:

17.4.1 During the procurement phase, GLX Constructors verbalized their commitment,

described their processes, gave assurances of their safety program, presenting their proposal PPP form, and answering questions.

17.4.2 Before the commencement (est. April to May 2018) of construction activities and during the initial build up, I met with the GLX Constructors senior management team to discuss my safety expectations, and my role in safety oversight of the safety

certification, safety assurance, safety performance, construction safety, right-of-way safety, passenger/public safety, occupational, health & safety, railroad safety, transit safety and anticipations.

17.4.3 I attended the GLX Constructors' safety kick-off event in April or May 2018 with employees at the beginning stages of the project. GLX Constructors' gave assurances to employees and project leaders of safety as its top priority. Employees signed a commitment poster, asserting their pledge to safety. I also spoke at this event, stressing my concern for the safety of workers, especially the risk of being struck by equipment or trains.

17.4.4 From April to the time of my termination, I became more alarmed with the high number of serious safety events, and was concerned with the lack safety performance the GLX Constructors.

18.0 GLX On-Track Safety Critical Risks (Roadway Worker Safety Program):

18.1 Due to what I perceived to be a series of imminent and unacceptable safety risks on the GLX project, I personally initiated a comprehensive safety investigation, safety audit, interviews and meetings towards determining the factors that required corrective action.

18.2 A near miss train versus equipment event occurred, involving Roadway Worker Protection (RWP) safety, reported I believe, in the early part March 2019. The preliminary report suggested a number of safety critical errors in on-track safety protection and communication protocols, placing the work group in a precarious train versus person unsafe and unacceptable condition of risk.

18.3 I met with my Deputy Director of Commuter Rail Safety, Timothy Vaughn to discuss the near miss. He reported to me serious concerns he had with the on-track safety of GLX construction workers and equipment, citing a number of safety violations and conflicts between the GLX Constructors, Keolis and MBTA Railroad Operations (RRO).

18.4 I called a meeting with senior executive representatives from the GLX Constructors, MBTA RRO, and Keolis to discuss the near miss and project disputes. Each of the representatives presented varied and divergent safety concerns and conflict issues. It was apparent that there was a high level of tension and disagreement between the parties.

- 18.5** All agreed as to the cause of the near miss as being human error by the Employee in Charge (EIC), who readily admitted his error. Keolis described their efforts to address the safety rule violation, and to educate EIC's and RWP support personnel.
- 18.6** My preliminary impressions suggested that there was merit to each of their concerns presented, but I also concluded that there were a number of serious conflicts, weaknesses, failures and problems. I indicated that I planned to conduct an unannounced on-track and construction safety audit of the GLX worksite. The GLX Constructors and Keolis informed me of their interim mitigations to address the concerns raised, and we adjourned until after my site visit. .
- 18.7** A day or two after this first meeting, a second near miss occurred on the GLX project, involving a GLX Constructor operator that attempted to cross an active track without authorization and protection. This second incident was deeply concerning as GLX Constructors and Keolis had both taken steps to mitigate the safety concerns.
- 18.8** On Sunday morning of the same week, I performed an unannounced RWP safety and construction safety audit of the GLX Constructors, along the access tracks leading into the BET yard. During my safety audit I found what I would classify as a complete breakdown in on-track safety protocols, non-compliance with numerous federal regulations (49 CFR 214), and nonconformance with the RWP safety program. My findings were recorded on MBTA Safety's Industry Safe system.
- 18.9** I also observed unsafe construction activities involving heavy equipment operations exposing construction workers to serious injury or death due to the rotation, movement, and operation of construction equipment without the use of spotters or barriers to limit and warn workers to stay clear of equipment movement.
- 18.10** Additionally, there was no site security, allowing employees, contractors and trespassers from either side of the track along a large area, exposing the project to increased safety and security risks. The lack of control also compromised the ability of the EIC or construction safety officer or manager to ensure proper safety or job briefings.

18.11 While at the site, there was no safety officer present to ensure the construction safety aspects of the project, nor did a member of GLX Constructors identify themselves as the site foreman or person in charge of construction safety.

18.12 I noticed a number of situations where workers walked in proximity to the blind side the rotating radius of the equipment. This observation was particularly concerning as the GLX project had one incident of a serious injury due to equipment a few weeks before, and is one of MBTA's highest construction project risk factors, due to a number of other incidents on other projects.

18.13 I interviewed fifteen (15) separate GLX Constructor employees and none of which were able to answer my RWP questions to confirm their understanding of job safety briefing and on-track safety. A few workers presented their On-Track Safety booklets, however I found their booklet's filled out incorrectly or the information was not correct. One worker admitted copying another's booklet as he had missed the job safety briefing, his information was also incorrect.

18.14 Keolis had provided one designated EIC, and three on-track safety support persons to provide on-track safety for the day. I was not able to locate or identify the designated EIC, and workers gave EIC names that were also incorrect. None of the workers could identify or locate the EIC, nor were they contact the EIC if need be. I found two of the Keolis on-track safety support persons sitting in their vehicles several hundred yards from the work site. They described their roles as EIC's. I explained there can only be one designated EIC per working zone, and they both identified the designated EIC, but also were unable to point him out, contact or locate him.

18.15 I also found a Keolis signalman sitting in his vehicle, who had been assigned to observe and ensure the safety and protection of the commuter rail signal systems from construction equipment activities, with one piece of within ten (10) feet of a CR signal system. He sat in his vehicle and was over 250 yards from the equipment work activities.

18.16 I continued the audit and interviewed workers to locate the designated EIC when I found one Keolis RWP on-track safety support person in proximity of a crane, and a work crew of about 15 people. He explained that he was not the designated EIC, and that the EIC was not around and

perhaps getting coffee. He was able to explain and provide the name of the EIC, and the on-track safety information.

18.17 After talking to the Keolis RWP support on-track safety person for about 10 to 15 minutes, I asked him to contact the EIC, which he did by cell phone, not the portable radio, which is normal protocol on a RWP controlled worksite. It took about 10 to 15 minutes for the EIC to arrive, and I noticed he had driven into the parking lot and walked into the work site.

18.18 I informed the EIC of the on-track safety concerns and violations, and advised him of my fears for the safety of the roadway workers on site, which totaled approximately 50 workers in multiple work groups, along with four (4) large pieces of construction equipment.

18.19 I noticed a lack of employee protection or warning from inadvertent contact the crane's span of motion, exposing employees to the potential of catastrophic injury or death.

18.20 I also witnessed a locomotive train pass through the work zone passing workers without being alerted by the EIC or RWP support employees, an audible warning from the train, and with no communication between the EIC and the train or the control tower.

18.21 At my prompting the EIC recalled all of the workers and performed a job safety briefing. I also spoke to the group detailing my findings and emphasized RWP safety, and the importance of the job safety briefing.

18.22 Shortly after notifying Project Manager Dalton I received call from Ryan Coholan, Chief Railroad Officer who was extremely upset that I had "Shut down the project!" I explained the seriousness of the on-track safety violations; however, he continued to assail me with criticisms, as he had done on other occasions in the performance of my duties as CSO. He indicated that people from the job site had contacted him, and that I had no business interrupting the project of the job site. I felt CRO was out of line with his accusations, only confirming to me that RRO's were placing the project ahead of safety.

18.23 During my interviews with a number of Keolis employees, they alleged that RRO's interfered with the authority and responsibility of the EIC, second guessing their actions to the point that many EIC's were backing down to pressure from RRO's and GLX Constructors.

18.24 I spoke to GLX Constructors senior management regarding the working limits of the work zone. They explained that the work zone spanned approximately five (5) miles, with one

designated EIC, and support EIC's with each of the work crews. They explained that there could be as many as 30 work groups within the working limits at a time, and they needed the entire 5 miles to perform the work.

18.25 Based on my preliminary investigation, observation, and interview findings I determined the following:

18.25.1 While the near miss incidents occurred due to human error factors, the predominant causes leading to the near misses errors was systemic in nature and significant weaknesses in communications, work zone on-track safety control, establishing redundant safety precautions, and a dereliction of duty by the GLX Constructor as the principle contractor responsible for safety, and Keolis in their performance of the RWP safety program.

18.25.2 GLX Constructors failed to provide properly trained, experienced and qualified safety officers to manage and enforce compliance with all aspects of safety, including OSHA, and FRA worker safety regulations, which led to high-levels of noncompliance.

18.25.3 GLX Constructors failed to effectively perform an OSHA-based job hazard analysis in collaboration with Keolis' RWP-based job safety briefing, and to coordinate and communicate with Keolis, subcontractors and roadway workers critical safety information and instructions. These failures led to a significant breakdown in communications, leading to misunderstanding, confusion and conflict.

18.25.4 GLX failed to secure the worksite to limit entry and maintain control in order to ensure all workers receive a job safety briefing and to ensure the safety of workers and the project from outside security threats or risks.

18.25.5 Failure of GLX Constructors to ensure a safety briefing whenever a disparity occurs leading to new hazards, or changes with respect to on-track safety of construction safety risks to employees.

- 18.25.6** GLX Constructors and its employees failed to issue a good faith safety challenge in response to the deficiencies in on-track safety and construction safety.
- 18.25.7** GLX Constructor's lack of an effective safety management system, continuous monitoring and worksite control represents an unacceptable risk to workers, passengers, public, project and CR system, requiring immediate mitigation, and the development and approval of a Corrective Action Plan.
- 18.25.8** Keolis failed to perform their respective on-track safety duties and responsibilities in accordance with Keolis' RWP program and 49 CFR 214, Railroad Workplace Safety, OSHA and industry best practices.
- 18.25.9** Keolis failed to perform job safety briefings for all roadway workers and to ensure each worker acknowledge their understanding.
- 18.25.10** Keolis failed to ensure effective coordination and communication with GLX Constructors and roadway workers.
- 18.25.11** Keolis failed to monitor and ensure on-track safety compliance with Keolis' RWP program, 49 CFR 214, OSHA and industry best practices.
- 18.25.12** Keolis' EIC, on-track safety personnel, and signalman abandoned their post and obligation, by sitting in their vehicles during construction and on-track activities.
- 18.25.13** Keolis' lack of an effective on-track safety performance poses an unacceptable risk to workers, passengers, public, project and CR system, requiring immediate mitigation, and the development and approval of a Corrective Action Plan.
- 18.25.14** RRO's function is to enforce and oversee the performance of Keolis in relation to the commuter rail service agreement between MBTA and Keolis as operator of MBTA's commuter rail system. RRO's interfered Keolis' responsibility to manage and perform on-track safety functions and responsibilities, creating conflict and misunderstandings.
- 18.25.15** The on-track safety program allows persons to issue a good faith safety challenge in order to follow defined process to resolve conflict. RRO's role poses an undue influence against the safety judgement used by Keolis to determine the most

appropriate means of on-track safety. Disputes or differences should be resolved by a coordinated effort between GLX Constructors, Keolis, Keolis Safety, GLX Project Manager, RRO's and MBTA's CSO with a clearly defined process.

18.25.16 Based on my preliminary analysis without the opportunity to work with GLX Constructors, Keolis and RRO's, suggests that only one person should be designated as the EIC, and all other support should have clearly defined titles, such as flagger or watchman lookout with specific roles and duties as delegated by the EIC.

18.25.17 Segregating the five (5) mile working limits into smaller work zone segments or limits, would most likely increase on-track safety, site control and communications.

18.25.18 Based on my preliminary findings I concluded that the way GLX Constructors in coordination with Keolis followed an unsafe on-track safety practices, constituting safety risk to roadway workers.

18.25.19 I was actively investigating incidents and deficiencies with the GLX project, GLX Constructors safety performance and communicated with the FTA and FRA to alleviate regulatory concerns, when I was terminated within a short time of meeting with Acting Administrator Butler and Administrator Fiorenzo.

19.0 GLX – Algonquin Gas Transmission Pipeline

19.1 In November or December 2018, I received an email from Algonquin Gas Transmission Pipeline (Algonquin Gas), filing complaint as to serious safety concerns perpetuated by GLX

Constructors in working in close proximity of Algonquin's high-pressure gas pipeline.

19.2 Algonquin alleged that GLX Constructors on a number of occasions performed construction equipment activities in vicinity of its high-pressure lines without Algonquin's express authorization, and without an Algonquin spotter ensuring the safety of the pipelines.

19.3 Damage to high pressure natural gas pipelines pose a catastrophic fire and explosion risk peril to life, injury, systems and gas service utilities, as evidenced by the catastrophic events in Lawrence in 2018.

19.4 Algonquin stated that they had tried to address the safety issues with GLX Constructors, without success, and were ready to take further action by filing a complaint with the DPU.

19.5 Algonquin also described that one of its technicians observed GLX Constructors working next to the pipeline, and in his attempt to stop the work, he was restricted from entering the right-of-way.

19.6 During the meeting between Algonquin and GLX Constructors, I was told that these actions posed a critical safety risk to the pipe-line, and any damage or apparent damage would require shutting down the line to perform a proper inspection, with a large segment of the community being without natural gas.

19.7 We were able to resolve Algonquin's concerns, however they indicated that any future violations would require a stronger response.

19.8 Based on my review of the complaint it was clearly apparent that GLX Constructors had violated critical safety requirements of the project and Algonquin's authority. I also concluded that GLX Constructors failed to remedy and correct prior complaints and concerns raised by Algonquin, and performed unsafety activities that placed the project, employees and the public at serious risk.

20.0 GLX – Train versus Bridge Abutment Safety Critical Risk

20.1 A few months ago, I conducted safety inspection verification of GLX Constructors realignment of commuter rail track before returning the track back to revenue service. During the inspection I identified a number of safety exceptions⁹, as follows:

20.1.1 Track ballast did not meet the commuter rail track and regulatory safety standards¹⁰. There were a number of areas where the ballast shoulder width was narrow, the ballast slope too steep and a lack of ballast between ties. Of particular concern was the limited or narrow ballast through the curve of the track next to a bridge abutment.

20.1.2 GLX Constructors QA/QC failed to identify these deficiencies Defects in shoulder ballast width and slop can compromise the structural integrity of the track structure and can lead to track defects, misaligned track and to a higher risk of derailment. The ballast was also the incorrect category of rock size.

9 **Safety Exception:** A safety critical condition, defect, omission or specification that requires correction or an approved work around that impacts safety.

10 **Class 4 Track:** Track condition that allows speeds up to 80 MPH.

- 20.1.3** The inspection also determined that the curved track encroached upon the minimum clearance limits of the bridge abutment, and needed to be realigned to correct the defect.
- 20.1.4** The close proximity of the bridge abutment to the curve posed an unsafe condition, in the event of a derailment. Keolis has a higher derailment incident probability of remote due to a number of recent derailments from a number of factors.¹¹ The severity of a derailment into a bridge abutment is potentially catastrophic. These aspects of peril establishes an undesirable to unacceptable risk rating, requiring corrective action.
- 20.1.5** Although guard rails are not mandated, AREMA standards recommend utilizing mitigation strategies to help reduce the probability and severity of a bridge collision due to a derailment. Guard rails provide a cost effective way to help reduce risk of a derailment on the curve leading to a collision with the bridge abutment. I noted this finding as a safety exception. GLX Constructors and Keolis stated they had available guard rail and placing the guard rail would relatively easy and inexpensive.
- 20.1.6** A few weeks before my termination, GLX Constructors forwarded a memorandum and release asking my office to sign it to remove the safety exception from the punch list. I asked Director Culp to arrange a meeting to discuss the matter and review the justification for removing the safety exception without taking corrective action. To remove the safety exception required approval of the CSO, and MBTA. I was terminated before the issue was resolved, and the unsafe condition still exists.
- 20.1.7** The lack of effective quality control and quality assurance processes to ensure safety critical project performance, presents somber fears and uncertainties to the integrity and compliance of GLX project requirements, safety standards, and regulatory safety compliance, placing at in peril the reliability of safety assurances

11 Derailment Factors: Keolis incident factors: lost wheel, shattered rail with bridge rail impact, human factors, over-speed, track defects, wheel defects, ballast defect.

and safety certifications. These failures introduce latent or hidden safety risks that

place in peril passengers, employees and the public.

21.0 GLX Safety Certification – Safety Critical Design Deficiencies

21.1 Safety Certifications which is a key safety function of the GLX project, “to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicle and equipment.”¹²

21.2 Vital aspects of safety certification occur during the planning, design and engineering milestones of the GLX project, in order to effectively identify, analyze, and eliminate or control hazards through safety design and safety engineering.¹³

21.3 Performing the Preliminary Hazard Analysis (PHA) as a part of the planning and the 30% design phase provides the most effective way to identify and eliminate safety hazards. Failing to do so exposes the project to the potential of latent, hidden or missed hazards, better addressed through safety engineering design. An important purpose of the PHA, is to consider MBTA Green Line safety risks, safety data, and lessons learned to more effectively identify and address risks.

21.4 In the summer or fall of 2018, I was informed that GLX Constructors had reached the 90% to 100% design on a number of safety certifiable elements, without reviewing MBTA’s Green Line safety risks, and completing the PHA’s. I met with GLX Constructors to inform them of my concerns, and to determine a corrective action path to addressing the deficiencies.

21.5 During the meeting with GLX Constructors the design called for passengers evacuating to the centerline of the right-of-way, rather than to the field side, exposing passengers and employees to collisions with passing trains on the adjacent track, posing an unacceptable risk.

21.6 Evacuating passengers to the centerline exposes passengers and employees to catastrophic risk factors of being struck by a passing train during evacuations. Additionally, centerline evacuations pose higher risk trip, pinch point, obstructions and other safety concerns. Typically field side evacuations help ensure a more efficient and safe way to clear the right-of-way towards

12 Safety Certification: In accordance with FTA Circular 5800.1, 220 CMR 151, 49 CFR 659, MBTA Safety Plan, and MBTA Safety Certification Program.

13 Design: 30% design

I, Ronald W. Nickle, declare my statements are true and correct to the best of my knowledge. 5/1/2019 Page **36**
of **88**

directional signage to the nearest platform or emergency, improved lighting, safer walking surfaces, less obstructions, and shorter distance.

21.7 During the meeting GLX Constructors argued that they had already incorporated the centerline evacuation as principle design feature in many of the designs advanced to date, and that they had considered LA Metro's design criteria as the model they were using. I explained that MBTA's existing and preferred method of evacuation is to the field side, the Green Line has a high number of evacuations and that MBTA passengers are prone to immediately self-evacuate.

21.8 I was actively working with GLX Constructors to address the PHA, evacuation design and other safety design features when I was terminated, and had not made the final approvals of the design phase of the project. This neglect by GLX Constructors to perform a proper, timely, and well informed PHA posed a significant safety risk and/or introduced serious lapses in the safety design of the GLX project.

22.0 Other GLX Constructors Safety Incidents:

22.1 Early in 2019 GLX Constructors seriously injured an employee while off-loading equipment. The apparent cause of the incident involved a lack of a job hazard analysis and safety briefing, improper and unsafe work practices, failure to failure to monitor site safety, and the employee working in an unsafe location during a high-risk activity.

22.2 During the week of my termination two other incidents occurred; one, collapse during demolition leading to a wall striking an adjacent business, and two, unauthorized excavation in the Boston Engine Terminal (BET) yard, causing damage underground signal cabling.

22.3 Based on these and other safety concerns described, as CSO I had precarious concerns with the safety performance of the GLX Constructors, and the lack of safety management in all areas of safety as evidence by the high number of issues that continued to manifest themselves.

23.0 Workplace Safety Critical Risks

23.1 Employee Electrocution – Safety Critical Electrical Safety Risks

23.1.1 It was during the active investigation of an employee electrocution that I was terminated within a few days of the meeting MBTA had with the Brian Cristy, Director of the Department of Public Utilities – State Safety Oversight and the director of the Department of Labor Relations (DLS) to discuss coordination

activities with MBTA as both agencies had safety oversight jurisdiction over MBTA.

MBTA's GM Poftak and CEHS Prominski, attended the meeting even though I

indicated it was not necessary for the GM to attend.

23.1.2 FTA's Office of Transit Safety & Oversight informed the DPU that the

electrocution incident fell under FTA's federal safety program, as the electrocution

involved a transit rail vehicle and a serious injury.

23.1.3 The DLS had workplace safety oversight jurisdiction of MBTA as of

February 1, 2019, to ensure MBTA's compliance with federal OSHA safety

regulations the Governor signed into law their authority to enforce workplace safety

compliance in accordance with Federal OSHA safety regulations and the General

Duty Clause.

23.1.4 It was during this meeting that I spoke briefly to the DPU and DLS about

the electrocution event and the need to work together to develop a Corrective Action

Plan as soon as possible. I believe the GM and the CEHS officer did not want me to

talk to the DLS and DPU about the electrocution event, nor the electrical safety

program. GM Poftak did not speak, but I could tell he was uncomfortable with this

part of the discussion, which only lasted five (5) minutes, and led to agreement to

meet. The safety concern was critical and the deadline to develop a Corrective Action

plan for DLS and DPU approval, is to be completed within sixty (60) days of the

event.

23.1.5 The electrocution event occurred, December 6, 2018, when repairman Tom

Fallon suffered serious and disabling injuries while repairing an Orange Line heavy

rail vehicle at the Wellington Carhouse.

23.1.6 Safety Specialist Collins and Safety Analyst Stone, initially responded and

investigated the incident by meeting with the shop foreman. The foreman and injury

report forms suggested that Repairman Fallon was the only person involved, and had

failed to take proper precautions leading to his injuries. I was not told of the incident

as I had left for vacation. Normally my office informs me of serious incidents, but

they had not advised me as they thought the injuries were not that serious.

23.1.7 On or about February 7, 2019 Steven Culp Director of Safety Engineering reported to me the incident, and that employees were planning to inform the GM of a complaint against the safety department for not responding to a Form B¹⁴ sent on or about January 31, 2019. He indicated that Charlie Murphy, Deputy Director of Transportation and Dan Meinsen, Deputy Director of Occupational Health and Safety were handling the Form B safety concern. Deputy Charlie and Deputy Meinsen had reviewed the Form B but had not proceeded far with the investigation as yet.

23.1.8 I reviewed the investigation file prepared by my office. The report suggested that the repairer was performing repairs without taking proper precautions to ensure that the electrical system was not energized. There was no mention of anyone else being involved. I also reviewed the Form B, noting a number of electrical safety concerns with bugging operations, and near misses.

23.1.9 I asked Director Culp to arrange a meeting with the head of rail maintenance Joseph Gentilucci, which he arranged either the next day or day after. I was told that union representatives wanted to attend, so they postponed the meeting to the following week.

23.1.10 Given the incident of December 6, 2018, the information on the Form B, and the safety complaint, I determined to conduct an unannounced inspection and investigation for the same weekend, on Sunday February 10th to the 11th 2019.

23.1.11 I arrived at the Wellington Carhouse Sunday evening at about 8:30 PM to make observations of the bugging and maintenance work activities. I identified myself as the Chief Safety Officer and explained I was going to observe the bugging¹⁵, operating and maintenance activities.

14 Form B: A form B is a form used to relay a safety concern to the safety department.

15 Bugging: Is an MBTA term describing connecting a 600 Volt 2,000 amp jumper cord to the trains to allow the propulsion of the train. A second type of bugging involves a jumper cord to energize the train to work on systems such as the HVAC, or other components (600 Volt 450 amps).

23.1.12 I immediately observed an Orange line train car depart the Carhouse and noticed that the vehicle had failed to sound an audible warning, failed to perform a safety stop before exiting the Carhouse, and exited the door without a spotter.

23.1.13 I also observed that the shop floor and pit areas were strewn with exposed propulsion bugs, energizing bugs, and electrical cords. The cords and cables were not organized in a way to minimize and control contact, arc flash or trip hazard risks.

23.1.14 I then observed a second transportation crew consisting of a motorperson and one support person, working to move an Orange Line pair out of the Carhouse. The motorperson went to the cab, and the support person assisted with connecting the propulsion bug. The work crew failed to do a walk around of the heavy rail vehicle (HRV) to ensure that energizing and propulsion bugs had been removed and no one was working on the HRV.

23.1.15 While attempting to move the orange line HRV, the support person committed a number of unsafe acts, which included connecting the propulsion bug without doing a walk around check, lack of appropriate PPE protection, and exposing himself to arc and contact electrical safety risks. He connected and disconnected the bug numerous times as the crew was having trouble moving the HRV. In each case the employee connected and disconnected the bug with his face close to the contact point without safety glasses or other PPE protection. During one disconnect the bug created a significant arc flash exposing the employee to intense heat and electrical risk. As a result of this event the main breaker burned out and the line became de-energized.

23.1.16 The crew contacted the shop foreman to request help. Two repairpersons arrived to assist. The repairpersons failed to do a safety briefing with the crew, and did not do a walk around before trouble shooting the problem. The repairer did not wear adequate PPE protection.

- 23.1.17** While the maintenance personnel were trying to troubleshoot the HRV, a car set came into the shop without performing a safety stop, and used the momentum of the train to roll into the shop until it came to a stop. There was no one acting as a spotter or ensuring a safe passage of the train into the shop. In the past incidents trains have rolled into the shop in similar fashion only to collide with a parked HRV, exposing repairers to injury or death.
- 23.1.18** I then met with the shop foreman and interviewed him regarding the December 6, 2018, as he was on duty during the incident. He told me a different story than what I had read in the reports, stating that a motorperson had connected a bug on the opposite side of the HRV while Repairer Fallon was working on it. It was during the replacement of the shoe that the transportation employee had requested be replace that the repairer was electrocuted.
- 23.1.19** I contacted Dan Deputy Director Meinsen, and asked him as to his recollection of the investigation, and he stated that the story relayed by the foreman was different, and made no mention of the transportation employee.
- 23.1.20** I then met with Repairman Kevin McKinnon who was working with Repairer Fallon at the time of the incident. Repairer McKinnon was very upset as he felt that the incident had not been investigated properly, and that he had observed a number of other near miss events. He also indicated that he was the person who had requested the Form B, or what he called a Good Faith Safety Challenge.
- 23.1.21** He explained to me how serious the injuries Repairman Fallon sustained, providing me photos of his injuries, and stating that he was still disable from work. He also told me that the force of the contact injury threw him some distance, striking his head. He provided me with a letter he prepared on February 8th, 2019, detailing his concerns and observations of other unsafe acts.

23.1.22 My investigation also determined that repairers regularly work double shifts, or 16 hours straight two times a week¹⁶. This represents a concerning risk to employees working with high-energy electrical systems, performing safety critical repairs to a variety of complex train systems.

23.1.23 On June 8th, 2016, I completed a MBTA System Safety Assessment – Fatigue Risk Hazard Analysis in response to NTSB findings and safety recommendations arising from CTA¹⁷ train derailment, and public concerns seeing MBTA employees asleep while working. The Safety Assessment determined that employees in safety critical roles such as dispatcher/controllers, signal repairers, maintenance repairs, train starters, and other safety sensitive employees, were working double and triple shifts. The Safety Assessment stated that operating personnel exposed to excessive hours of work imposes,

“...a 1C Unacceptable Health and Safety risk to Operating Personnel (any person associated with the operation, service or maintenance of transit vehicles, infrastructure, systems or equipment; whether in revenue service or non-revenue service).”¹⁸

The Safety Assessment recommended that the Hours of Service Policy¹⁹ be applied to all operating personnel, The Safety Assessment was distributed to DGM Gonneville and other members of management for review and approval. DGM Gonneville took the report under advisement, and asked that it remain in draft form, so as to limit public, regulator disclosure or the issuance of a corrective action plan.

23.1.24 Based on my site visit and investigation, it seemed apparent that there existed a major breakdown and lack of an effective electrical safety program,

¹⁶ **Double Shift:** Graveyard and daytime shifts.

¹⁷ **CTA:** Chicago Transit Authority – train derailment due to operator falling asleep while operating. Train rolled up an escalator.

¹⁸ **MBTA System Safety Assessment - Fatigue Risk Hazard Analysis** June 8, 2016, pg. 21.

¹⁹ **MBTA Operations Special Order** #14-013 & #14-014 “Limitation of Work Hours”

I, Ronald W. Nickle, declare my statements are true and correct to the best of my knowledge. 5/1/2019 Page **42** of **88**

procedures and safety practices, constituting an imminent unacceptable risk, requiring further mitigations and a corrective action plan.

23.1.25 Two or three years earlier there had been an electrocution incident, with management developing a Special Order²⁰, detailing bugging procedures. The December 6, 2018 incident, the Form B, and my observations confirmed that employees were not following the Special Order. The MGL prescribing MBTA's obligation to comply with federal OSHA, and the General Duty Clause that MBTA address the electrical safety risks and develop a corrective action plan.

23.1.26 My investigation also confirmed that bugging procedures were different for the Red Line, and Blue Line, noting that the Blue Line used a proper lock-out tag-out procedure to eliminate the risk during Carhouse bugging activities. Bugging activities also create especially risky outcomes during yard moves, and in the rain or snow.

23.1.27 The office of the CSO had investigated a number of electrical electrocutions, and had determined the risk of electrocution to be MBTA's highest employee safety risk. The CSO submitted reports, safety recommendations, and safety bulletins to provide guidance, prompt management to act and was working actively investigating the safety issues, and working to develop and implement a Corrective Action Plan in coordination with the DPU, DLS and FTA, at the time of my termination.

23.1.28 On or about February 11, 2019, at about 8:00 AM, I issued a written safety stand-down to alert management of the concerns and to ensure that employees were re-instructed, and to ensure effective monitoring, as MBTA worked towards the development of a CAP. Director Culp contacted CMO Hicks, Transportation Director Norman Michaud, and Director Gentilucci to inform them of the safety stand-down, to confirm the communication.

20 Special Order: Is an interim rule and procedure used by MBTA operations to address operational and safety concerns.

23.1.29 I also personally discussed the safety stand-down to, Todd Johnson Chief of Transportation Delivery, Steve Hicks Chief Mechanical Officer, Nancy Prominski, Chief Environmental, Health and Safety Officer, representatives of the affected Union, and other managers directly and in joint meetings.

23.1.30 I attempted to inform the GM and DGM but they did not take my calls, nor did they call me back.

23.1.31 It was during the course of my investigation and handling of this matter that I was suddenly terminated.

23.2 Electrical Safety – Highest MBTA Employee Risk Factor

23.2.1 In 1970, when OSHA was formed, public entities, such as the MBTA were not required to follow OSHA. MBTA decided at that time not to voluntarily follow OSHA or industry best practice safety standards or guidance. As such, MBTA lacked an electrical, confined space, and lock-out/tag programs, and its safety practices were minimal nor consistent with any established safety regulation, standard or best practice. To establish an OSHA compliant workplace, I worked with my staff on a large number of measures and efforts to advance the program. The office of the CSO accomplished the following:

23.2.2 Developed a voluntary working relation with the DLS in 2016, and participated with DLS on a number of safety concerns, which they issued reports and recommendations, including MBTA's lack of an effective electrical safety program.

23.2.3 MBTA's OHS Safety Plan in concurrence with ISO 45001, and OSHA and DLS's recommendation that MBTA have a health and safety plan. GM Ramirez signed the OHS Safety Plan on January 17, 2018, after concurrence by senior management. The plan was also provided to the Board for endorsement, acceptance and support.

23.2.4 Created and administered the OHS Steering Committee (senior executives), OHS Working Group (senior managers), and various OHS task teams to prioritize, discuss, approve, develop, and implement OHS safety programs. All had

unanimously agreed with electrical safety, confined space, and lock-out tag-out as the highest priority.

23.2.5 Developed, approved, and distributed twenty seven (27) Safety Bulletins, from July 2018 to December 2019, for all OSHA 29 CFR 1910 & 1926 regulated categories, which included electrical safety, confined space, and lock-out tag-out programs.

23.2.6 MBTA safety data indicated a high number of electrocutions, burns, man-hole explosions, and arc flash events and injuries, with one fatality to a trespasser who made contact with the third-rail after the St. Patrick's Day parade. This trend posed an imminent unacceptable electrical risk to employees performing inspections, maintenance and/or operational activities.²¹

23.2.7 Contractors performing construction work on MBTA's site contacted third-rail and energized electrical systems due to inadequate or lack of effective lock-out or tag out procedures.²²

23.2.8 Given the seriousness of the safety risk, it remains imperative that MBTA develop and implement fully functioning electrical, confined space and lock-out tag-out safety programs, to comply with federal OSHA regulations, General Duty Clause, and NFPA 70E Standard for Electrical Safety in the Workplace, ANSI C2 (NEESC), and other safety standards and industry best practices to protect the safety of employees and contractors. GM Poftak and CEHS Prominski, did not ask nor was I able to explain how critical it was to discuss and coordinate a Corrective Action Plan with the DPU Director Cristy and DLS's Director.

23.2.9 I am certain that my discussing the electrical safety electrocution incident with regulators is the reason for my dismissal, as the GM, DGM and CEHS wanted to impair my ability to discuss safety concerns openly with regulators. The GM and

21 Electrocution Activities: Manhole, bugging operations, stored energy, arc flashes, contact with electrical systems and burns. One trespasser was fatally injured after a St. Patrick's Day parade, and a number of serious injuries or incidents with employees and contractors.

22 Wellington Yard Contact Event: Contractor made contact with third rail that had been locked-out by power. The investigation determined that due to an unrecorded splice with another power line the third rail was still energized and posed a serious safety risk.

CEHS came from private industry, where you do not typically work with regulators as frequently as we do with the DPU, FTA, FRA, and DLS. Their lack of understanding of the history and magnitude of electrical safety risk, their dearth in dealing with transportation regulators, and working with a safety program that mandates MBTA's proactive approach to addressing safety hazards.

23.3 Manhole Injury Incident: An incident occurred in May or June 2017, involving a power department splicer, when hot material spilled onto him while in a manhole. A transit police officer was asked to move a molten caldron of heated material, burned himself and spilled onto the repairers head and body, causing third degree burns. I personally investigated the incident, due to its severity and complaints of unsafe conditions received from union representatives.

23.3.1 The investigation and safety assessment determined that splicer's were exposed to unsafe and unhealthy conditions (lead) and hazards, without appropriate electrical, confined space, emergency recovery, and manhole safety training. Additionally, manhole employees were not provided adequate PPE, air monitoring systems, recovery systems, and other important resources to ensure the health and safety of employees. The investigation report included a number of safety recommendations to address the unacceptable safety risks.

23.3.2 MBTA is the second highest user of electricity in Massachusetts, with MBTA's power department handling low, medium and high-voltage systems, including power distribution.

23.3.3 MBTA also has over 10,000 manholes, which are not regularly inspected or maintained on any schedule. Many of MBTA's manholes are in a poor state of good repair, posing numerous safety hazards (e.g. lead based splicing, mud, water, dangerous air quality, cave in, arc flash, contact, deteriorated electrical cables/splices, and other risks).

23.3.4 The office of the CSO has received a number of safety complaints from power workers describing unsafe conditions. A number have also indicated

management's propensity towards retaliation for bringing safety concerns, stating that if a train line loses power, then they are required to risk their lives to fix the problem. John Connell Deputy Director of Infrastructure Safety worked with me, and the power department employees to discuss their concerns, and work with them in the development of the electrical safety program.

23.3.5 MBTA electrical systems, cables, circuit boards, wiring, manholes, third rail systems (feeder cables, ducts, and other third rail systems), overhead catenary systems and bugging operations expose repairers, E&M, vehicle maintenance, transportation and other employees and contractors to contact, arc flash and burn safety risks and hazards on a regular basis without using lock-out tag-out procedures for many electrical risk exposures. The causal factors included and are not limited to the following risk factors:

23.3.5.1 Exposed, deteriorated, damaged or abandoned electrical cable, wiring, circuit board, power station, and other distribution and electrical systems.

23.3.5.2 Lack of, errors or omissions in plans/drawings, signage/tags/labeling, barricades, incident energy, work separation boundaries/markers and other electrical safety protocols. .

23.3.5.3 Lack of, errors or omissions in arc flash assessments (Thermal Performance Values), AR PPE/closing, AR labeling, and configuration anomalies, lack of plans/drawings, lack of signage/labeling/tags/barricades, arc flash boundaries, and other arc flash safeguards.

23.3.5.4 Lack of an effective lock-out/tag-out program in compliance with federal, state and industry best practices. Lack of following existing lock-out/tag-out procedures while work on energized systems or equipment.

23.3.5.5 Lack of an effective stored electrical energy safety protocols, procedures or program.

23.3.5.6 Lack of or ineffective ongoing and scheduled inspection, maintenance, repair and decommissioning program.

23.3.5.7 Lack of an ongoing manhole and errant energy inspection, maintenance, repair and rehabilitation of manholes on a five (5) year schedule.

23.3.6 Based on a number of safety inspections, complaints and investigations, I considered the state of good repair of the electrical systems to be poor, and electrical safety risks to be high.

24.0 2015 Starting Point - Break Down in MBTA Safety Programs

24.1 From September 12, 2011 to March 2015, I received very good job performance reviews, and had accomplished a large number of major advances in MBTA's safety programs. After the winter of 2014-15, I noticed a significant change in the organization and began experiencing various levels of coercion, undue influence and pressure to omit safety findings by DGM Gonneville and Director Cristy, later leading to more encumbrance to not investigate, or to generate Corrective Action Plans in accordance with MBTA's safety plan, 220 CMR 151, 49 CFR 659, and industry best practices.

24.2 I also experienced pressure from the DGM Gonneville, GM Ramirez and CEHS Prominski to suppress, misrepresent, ignore and misinform regulators and the public; safety findings, causal factors, hazards, risks or other safety concerns in communications, reports, and correspondence.

24.3 In 2015, MBTA faced a torrent of public criticism, ridicule and scrutiny after a series of snow storms that shut down part of MBTA's system, leading to the termination and forced resignations of the majority of MBTA's senior executives, and leading to enormous organization upheaval, instability and distress. The high turnover of executives continued through to my termination.

24.4 It is during this timeframe that I began to experience efforts to undermine my authority, responsibility and obligations as Chief Safety Officer, and erosion of the office of the Chief Safety

Officer's autonomy, and ability to communicate with regulators, which increased significantly

until my termination on March 22, 2019.

24.5 I contend that the triggering mechanisms for this downward trend occurred after a series of events, compounded by intense public scrutiny, regulatory focus on safety, and dramatic organizational upheavals, as follows:

24.5.1 FTA Safety Directive #15-1 (WMATA June to Aug. 2015)

24.5.2 Green Line Type 8 Derailments (June, July 2015)

24.5.3 Red Line unattended train incident (Dec. 10, 2015)

24.6 FTA Safety Directive No. 15-1:

24.6.1 On June 17, 2015, FTA released its Safety Management Inspection (SMI)

report to the public, after performing an audit of WMATA's safety program, which revealed major concerns, "...identified organizational deficiencies and operational concerns that limit WMATA's effectiveness in balancing safety-critical operational and maintenance activities with the demand for passenger service."

24.6.2 The SMI report identified forty four (44) safety findings and determined seventy-eight (78) required actions for WMATA's Metrorail System, and ten (10) safety findings and determined thirteen (13) required actions for WMATA's bus safety program.

24.6.3 As a result of the SMI report and other factors, FTA issued Safety Directive No. 15-1 Notice No. 1, under 49 U.S.C. 5329, and later took steps to withhold \$38.5 million in federal funds from WMATA. The decision by FTA to conduct the SMI,

arose out of two WMATA incidents and an increasing trend of the following factors:

- Fire/smoke related incidents (15 event/2013 to 29/2014)
- Fatality of a contractor and two WMATA employee injuries when struck by a 40-foot section of rail during an emergency evacuation out of a work zone, and
- A third rail electrical arcing event near L'Enfant Plaza station resulting in a

toxic smoke that caused one passenger fatality and 90 injuries.

24.7 The FTA's Safety Directive, generated significant public scrutiny, congressional hearings and had a momentous impact on the transit community, as well state safety oversight agencies.

24.8 Many of the safety concerns the SMI identified and the events that led to the SMI, were similar to MBTA's safety risks, only MBTA's risk was higher due to a substantial maintenance back log, aging infrastructure, and poor state of good repair. MBTA's fire/smoke, ROW, and arcing events leading to station evacuations were significantly higher than WMATA's.

24.9 In addition, the SMI safety findings and required actions, posed similar risks to MBTA, and in most cases the risk were higher.

24.10 I notified the GM, management and the legal department of FTA's action, as being a first enforcement action under their new regulatory authority; Federal Transit Laws Title 49 USC Chapter 53; 49 USC § 5329 - FTA Safety Program, with recommendations that MBTA work to identify and correct unsafe conditions.

24.11 Shortly, after the release of the SMI, WMATA experienced a mainline derailment on August 6, 2015, with no injuries, due to a defective rail condition and loss of service for an extended period of time. Despite the probable cause being the state of good repair, inadequate and ineffective track inspection and maintenance practices, WMATA's Chief Safety Officer was blamed.

24.12 That same day, the CSO was forced to resign due to Washington Post stating that WMATA's safety program was like, *"...paper tigers too timid to close dangerous holes in Metro's safety practices"*

24.13 WMATA's Board voted "no confidence" in the WMATA's Chief Safety Officer, despite WMATA's safety program and Chief Safety Officer being publicized as one of the strongest in the country at that time, by the FTA and transit industry safety professionals.

24.14 At this juncture, MBTA's management began to become more fearful of intervention by the FTA, and began to influence what MBTA Safety reported to the DPU and FTA.

24.15 It has been my experience as a safety and risk management professional that when an organization leans more towards operational priorities over safety, it tends to substantially increase the probability and severity risk of a catastrophic event taking place, as reported by countless calamitous safety disasters worldwide.

24.16 As a result of what occurred with WMATA and the Tri-State Safety Oversight Committee, both the MBTA and DPU-SSO became highly concerned that a similar outcome could befall the

two agencies. In response, both MBTA and DPU-SSOA operated out fear, paranoia, hypervigilance (public scrutiny, media, regulatory intervention) and further intensified a hostile work environment, where suppression of safety information, misrepresentation, coercion, threat, intimidation and retaliation is commonplace and seriously compromised MBTA's safety programs.

24.17 After speaking with GM DePaola, I recommended that in the event MBTA sustained an serious safety event, MBTA should utilize a number of strategies to mitigate, correct, and document MBTA's responsiveness and actions, and work closely to keep regulators informed. GM DePaola agreed with this strategy, which helped MBTA demonstrate its effectiveness in addressing the Green Line Type 8 derailments in the summer of 2015.

25.0 Green line Type-8 Train Derailments:

25.1 In the early part of the summer of 2015, MBTA experienced three (3) Type 8 Ansaldo/Breda LRV car center-truck derailments on the Green line in close succession. The CSO investigation determined a number of factors, involving the deteriorated condition of the center truck assembly, poor track conditions, and excessive operating speeds.

25.2 The Type 8 LRV car had a history of center-truck derailments necessitating the entire fleet being removed from service on July 10, 2000, after a 4th derailment, and returned to service after implementing a CAP. The investigation determined design deficiencies, lack of due diligence to design the truck assembly for the Green line conditions, and a propensity of low-floor truck assemblies to derail.

25.3 Modifications were made to the truck assemble design to reduce the risk. Additionally, MBTA committed to rigorous track and truck inspection, measurement and maintenance procedures.

25.4 After the second Type-8 derailment in June 2015, I issued a MBTA Urgent Safety Advisory,²³ calling on management to work with MBTA Safety to determine the probable cause(s), interim mitigations measures and develop a corrective action plan.

23 Urgent Safety Advisory: A SMS tool used by the CSO to notify management of an unacceptable safety risk, requiring prompt action to investigate, mitigate and correct the unacceptable safety risk to acceptable levels.

25.5 A third derailment occurred I believe in July 2015, at which point I issued a MBTA Safety Directive,²⁴ and speed restriction with authorization from GM DePaola. At this juncture DPU and the FTA Office of Safety & Oversight were deeply concerned, and actively observed and participated in meetings and discussions regarding the derailment. MBTA served as the lead investigator of the derailments in accordance with state and federal regulations.

25.6 During the investigation of one of the derailments investigations some time that period of time, the track department submitted a false report, indicting the track was within MBTA track safety standards when it was not. My investigation had determined a red track condition and the report indicated a green condition. I had checked the track geometry reports and discovered the red condition, and that the track department had not issued a speed restriction or had taken action to correct the unsafe condition. The track department initially refused to correct the report but later did. This breach presented a number of serious concerns with regard to the integrity of reported information from departments.

25.7 There was also another derailment investigation that uncovered an error in reporting the wheel profile of a Type-8 wheel that contributed to a derailment. Management acknowledged the error in reporting, however this also left me with concerns as to the accurate reporting of critical information.

25.8 The investigation of the three derailments in the summer of 2015, confirmed that the truck assemblies had not been maintained or rehabilitated properly with creep-age in the soft components of the yaw dampener and other truck assembly modifications as part of the original corrective action. The track profiles were inadequate due to lack of grinding, which had not been completed for an extended period of time. The final factor related to unsafe operating speeds as a contributing factor. MBTA developed and implemented 27 corrective actions, and avoided intervention by DPU or the FTA, due to the prompt and aggressive efforts generated by the CSO.

24 Safety Directive: A SMS tool used by the CSO to notify management of an imminent unacceptable safety risk, requiring immediate action to investigate, mitigate and correct an imminent unacceptable safety risk to acceptable levels. Safety directive may also suspend, restrict or shut-down operations or a project in order to protect the safety of passengers, employees, contractors and the public.

25.9 Management initially resisted the investigation findings and the MBTA Safety Directive (SD). They disliked the increased level of accountability, visibility and the prescriptive aspects of the SD issued by the CSO, and management verbally and behaviorally expressed its outright frustration and criticism.

25.10 I countered by explaining that as a transit agency, being responsible and accountable for its own safety program and efforts to deal with safety issues in a documented open way is the most appropriate course of action to ensure the safety of passengers, employees and the public. With the support of GM DePaola, we were able to successfully address the serious safety concerns without FTA intervention, and without undue media frenzy due to the actions taken.

25.11 After this series of events, I began to notice efforts by management to suppress or ignore sensitive safety findings and safety recommendations. These resistive efforts continued until my termination, as no longer had the protection and interface with the GM since 2016 on transportation issues.

26.0 Feb. 8, 2019 Type-8 Center-Truck Green Derailment:

26.1 On February 5, 2019, MBTA had a mainline derailment on the Riverside line, when a Type-8 center-truck derailed due to a unsafe track condition. The track department indicated that the cause was a transitional issue of the track surface at a track-joint from one rail to the other. DGM Gonneville had assigned CMO Hicks as the lead investigator, again negating MBTA Safety's role to investigate independently.²⁵

26.2 When the derailment occurred, DGM Gonneville requested from DPU Director Cristy authorization to re-rail the train without delay, to accommodate Patriot Parade passengers. DGM Gonneville did not consult with me nor had a determination been made as to the cause, and whether or not an unsafe condition existed. The DPU agreed to the request, which was also unusual for the reasons already stated, and also as MBTA's safety plan calls on MBTA, including the CSO to make the determination as to the hazard risk. It is not common practice for a state safety agency to make such a decision unless the DPU issues an order, and only if MBTA fails to

²⁵ **DGM Gonneville** had reassigned CMO Hicks to be the lead investigator of another derailment on the Green Line on or about December 8, 2018, and assigned Ryan Coholan to be the lead investigator of a number of commuter rail incidents.

respond to an imminent and potentially catastrophic risk exists, not to risk a second derailment due to a hasty decision. Typically the transit agency makes the determination.

26.3 I contacted Director Culp who was in the EOC²⁶ with management to inform them that I was in route and a restricted track speed would be necessary to continue revenue service, and only after the inspection confirms there is no risk.

26.4 When I arrived the train had been re-railed, and the response team were readying to return the track to service. I inspected the rail-joint and immediately noticed an unsafe track condition that would require a substantial speed restriction.

26.5 The unsafe track condition originated back to the summer of 2015 Type-8 derailment findings and Corrective Action Plan, specific to rail grinding to remove rail irregularities and restore the profile from worn rails. MBTA performed rail grinding on the Green Line to address the unsafe condition identified at the time.

26.6 A contractor had ground the rail under the supervision of the track department. When they came to the rail-joint they had stopped grinding within 10 to 14 inches on either side of the joint.

This meant that the 20 to 28 inches of track did not have the same gauge profile as the ground rail.

26.7 The derailment occurred at this transition point due to the inconsistent rail profile, which meant that the unsafe track condition dated back to the omission of profiling the area on either side of the joint.

26.8 My inspection also confirmed that the path of the train along this portion of the rail, caused the wheels to deflect and yaw approximately 20 to 30 degrees, leaving a visible indicator where the train wheel runs atop the rail head leaving a clear pattern. Track inspectors should have easily observed this unsafe wheel movement as it was clearly evident and occurred over two plus years.

26.9 I spoke to the Director of Maintenance of Way Joe Gushue, and pointed out the defect, and spoke to him about the speed restriction. He explained that the rail grinding crew could not grind the joint due to the rail grinding configuration and interference from the joint-rail plate, which I agreed with. He wanted to restrict the speed to 30 MPH, and I said based on what I had inspected

26 EOC: Emergency Operation Center – department leader’s assemble to monitor emergency or special events.
I, Ronald W. Nickle, declare my statements are true and correct to the best of my knowledge. 5/1/2019 Page **54**
of **88**

the restriction needed to be slower. When the test train passed over the track it was determined six

(6) MPH as a safe track speed, due to the dramatic deflection of the wheels.

26.10 Based on my investigation, I concluded that the derailment occurred as a result of an

abrupt deflection due to an inconsistent rail profile, caused by failing to grind the joint area

consistent with the remainder of the rail. The Type-8 Center Truck has a propensity to derail if

track and wheel profile conditions are not ideal. Additionally, I felt that the track inspection

process conducted three (3) times a week, had failed to identify the unsafe condition. Finally, I

was concerned with other track joints on the remainder of the Green Line system, which Director

Gushue said they would inspect.

26.11 About two (2) weeks before my termination, I attended a joint meeting by phone with GM

Poftak, DGM Gonneville and other senior management in preparation for the quarterly FTA

Regional meeting. During the preparation meeting DGM discussed the Green Line derailment, and

provided an overview of the findings. I told him that my investigation was not complete and

perhaps it was best we wait for the next quarterly meeting. DGM described the cause different

from my conclusions, and I explained to him my findings, which he did not agree with.

26.12 He said he had the investigation report, which confirmed what he had described, and that

mine were incorrect. I tried to explain my observations and he cut me off saying, "Ron I will have

my engineers speak with your engineers," which he never did. I was terminated before any

meeting with him or his engineers. I did speak with Director Gushue, AGM Johnson, and CMO

Hicks, explaining my findings and showing photos to support my conclusions, they all agreed with

the findings. I am not sure what DGM reported to the FTA.

26.13 I believe that DGM Gonneville and his investigators wanted to misrepresent or omit the

specific findings out of fear that MBTA would come under criticism by regulator or the public for

the failures of MBTA to properly grind the rail, and to identify the track defect condition, which

would require a Corrective Action Plan.

27.0 Unattended Redline Train:

27.1 On December 10, 2015, while into my third day of vacation, I received notification from

MBTA OCC that an unattended train event had occurred, wherein a Red Line heavy rail vehicle

left the station without an operator, carrying 50 passengers. The train traveled a little over 5 miles before a controller supervisor brought the train to a stop by remotely de-energizing the third-rail.

27.2 The media reported the incident on national news, and regulatory agencies expressed major concerns and questions. I immediately returned to Boston from Salt Lake City, Utah to conduct a comprehensive safety investigation the same day.

27.3 Safety's investigative role is mandated by federal, state and industry standards²⁷. The scope and purpose of the safety investigation is to independently determine and analyze causal factors, systemic dynamics, hazards and corrective actions, regardless of whether or not such hazards or risks are attributable to the incident or not. The investigate role is to be unencumbered, transparent, forthright, thorough and prompt. Failing to do so, may place the CSO under violations of federal or state laws, rules or regulations.

27.4 As I launched the unattended train investigation, Brian Cristy, Director of Transportation, Oversight Division of Public Utilities informed me that he needed to recuse himself from the investigation as he had a personal association with the motorperson involved with the incident. He then formally sent a letter to my office confirming his refusal.

27.5 MBTA Investigation Report # A15-367 dated February 24 2016, involved a wide-ranging investigation to examine findings, interviews, research, analysis, causal/contributory factors, and corrective action recommendations. MBTA Safety completed the investigation report in draft form and distributed it to the affected departments heads, System Safety Working Group (mid - upper management), and the Safety, Security Executive Review Committee (senior executive management) and legal for review, approval and acceptance. After the draft was approved, MBTA Safety then provided the draft to the DPU as a courtesy for their review before the final report would be submitted.

27.6 MBTA Safety met with DPU officials to review the draft report and to answer questions. Mr. Cristy was not present as he had recused himself. After the meetings, we received an email from the DPU, questioning the use of some terms such as "practical drift" and "safety exception".

27 Investigation Standards: MBTA Investigation Manual,

APTA Investigation standard (RT-OP-S-002-02 Rev.3), 49 CFR 659 and 220 CMR 151

I, Ronald W. Nickle, declare my statements are true and correct to the best of my knowledge. 5/1/2019 Page **56**
of **88**

27.7 Shortly after receiving DPU's email, Director Cristy called me to discuss the investigation report. He was very angry and threatening during the call. I reminded him that he had recused himself from the investigation, but he continued in rage. He asked me why we used the term "practical drift", I explained it was a word in safety to describe *"the slow, steady uncoupling of a practice from written procedure"*.

27.8 I also told Director Cristy that FTA's Transportation Safety Institute instructs safety and oversight professionals teaching the term as a viable safety risk. I further explained that there was a clear indication of practical drift associated with the unattended train event. He directed me to take this practical drift section out of the report. I explained that the report had been approved by management and MBTA's safety committees, and I could not be able to without approval.

27.9 He then asked me why we used the term "safety exception". I explained that it was a term originating from safety certification terminology to track safety critical systems, subsystems or sub-items towards hazard resolution. I also told Director Cristy that we use the term all the time as part of MBTA's Safety Certification program. He told me that these term out of the report. I told him that the transit industry as a whole uses these and other words not contained in the federal safety program, and represent common safety professional terms.

27.10 He went onto say that *"I do not want anything in this report that will give Vazquez any chance whatsoever that he could win his labor dispute and return to work."* I was surprised by his comment, as the transit safety profession works to determine not only human factors, but also latent, design and systemic and organizational concerns.

27.11 In response, I tried to as professionally as possible indicate that the scope of the investigation by the safety department is not to punish or see someone disciplined, we simply comment on it neutral tones. Discipline is solely a management role and responsibility and should not be the focus of a safety investigation. I told him that the investigation does reference the human factor component of the operator tampering with a safety device as the probable cause, but not the only cause. I informed him that practical drift from the original intent of deadman switch use, had been compromised by many employees using a method to by-pass the deadman switch. I

also mentioned that employees were ignoring the manual release procedures, going straight to emergency by-pass on a regular basis increasing the risk of an inadvertent runaway train event.

27.12 I had personally interviewed a number of motorpersons, trainers, and managers, confidentially that confirmed was a common hidden practice, and many had learned how to by-pass the deadman switch²⁸ using the radio cord, pencil, or anything that inhibits the cineston handle shortly after training for decades. Although it was a known rule violation, operators still by-passed the deadman switch.

27.13 I explained to Director Cristy that these findings represents a serious systemic safety concern that needed to be corrected. He became more agitated and increased his threats verbally. He said “Why your report is like a NTSB investigation, and shouldn’t be!” I said the investigation complies with the requirements guidance of our safety plan, MBTA’s Accident Investigation Manual, DPU, FTA and APTA. I felt his comment about NTSB unusual, as whether the NTSB does an investigation or any other agency does and investigation, each uses the best techniques available to determine findings, causes, hazards and risks.

27.14 He then threatened me by reminding me that he helped get rid of Cindy Gallo, a former MBTA Safety Director. He had told me this story on a number of occasions. The mere inference of his statement was in my opinion a purposeful attempt to intimidate and threaten me. Our call ended and we were not able to resolve the issues. I refused to make the changes as I felt his comments were inappropriate, and that he had violated his recusal. I also felt that he was trying to negatively influence the investigation, which I felt was unlawful and wrong. I informed Director Durso and Director Culp of this conversation.

27.15 A few days, I received a cell phone call from COO Gonneville. He rarely met with or called so his call was something I remember clearly. He wanted to talk to me about the investigation report, after Director Cristy called him. COO Gonneville, relayed the same concerns that Director Cristy had stated to me, including the NTSB comment. He also wanted the systemic and organizational findings out of the report.

²⁸ Deadman Switch: A transit term describing a safety feature that requires the operator to keep it engaged. In the event the feature becomes disengaged the train automatically stops.

- 27.16** I informed COO Gonneville that Director Cristy had recused himself and materially changing the investigation report was not possible. I explained the report had been approved by the GM, legal and management, and changing it would compromise the integrity of the report. COO Gonneville then said: “Now Ron, things right now are very intense as you know. You may want to be very, very, very careful, Ron we can’t have the public learning about this and we don’t want to upset Brian.”
- 27.17** This left me in a moral dilemma, as many executives had been forced to resign, terminated or reassigned. COO Gonneville carried a lot of support from the Secretary and the Governor and I was conflicted. I decided to redact the report submitted to the DPU, however I informed COO Gonneville and the DPU that I would retain the original report in order to address the safety risks.
- 27.18** I would like to point out that after this incident, both DGM Gonneville and Director used the NTSB investigation comment to impair my ability to investigate and report systemic, organizational, design or other hazards and risks many times over the next few years until I was terminated. They preferred the fault of an incident to rest with the operator or employee, even though there were contributing factors or posed safety risks, and wanting me to limit or omit them from the report.
- 27.19** As time progressed both DGM Gonneville and Director Cristy, in different ways undermined investigation findings, hazards, corrective actions plans, with intent to limit, misrepresent or withhold such information from the FTA and public. These actions led to Director Cristy calling DGM Gonneville on a number of occasions to place limits on my authority and responsibility, and to report or discuss safety issues with the FRA or FTA. I also felt that DGM Gonneville and Director Cristy had inferred I could lose my job if I didn’t give in to their demands and influences.
- 27.20** DPU’s Program Standard describes the process that is to be used to resolve disagreements as follows:
- 1) *Report the areas of disagreement in writing to, and negotiate with, the Transportation Authority until the dispute is resolved;*

- 2) *Develop, and submit to the Transportation Authority for implementation, its own written CAP according to the requirements of 220 CMR 151.07; or*
- 3) *Issue any Order that it deems necessary.*

As MBTA's CSO, we presented our reports and documents to the DPU. If the DPU did not agree they are supposed to respond in writing, or have a meeting with all applicable parties to reach an agreement. We met on a monthly basis, also as a way to resolve differences. As time progressed, Director Cristy would contact DGM Gonneville anytime he was not happy with the most basic issues. This form of intimidation led to a deterioration in our ability to resolve issues using an arm's length, and respectful approach.

27.21 To help illustrate the discord, in one of my last meetings with senior executives Joe Cheever, Todd Johnson, Steve Hicks, and Nancy Prominski, to discuss a new way to help protect safety sensitive information, AGM Cheever stated, *"Well I sure don't want to upset the DPU, you know we cannot get them mad, as it only causes problems."* CMO Hicks was even more adamant saying that *"Anytime Brian does not get his way he runs to Jeff Gonneville, and because Jeff does not want to upset Brian we always concede, so it's better that we don't even try."*

28.0 NTSB Safety Recommendation – Green Line PTC

28.1 In May 28, 2008 MBTA suffered a catastrophic train to train collision, killing the operator and injuring passengers, with damages totaling \$8.6 million. The NTSB investigated the accident, and issued Safety Recommendation R-09-014, *"Develop and implement a positive train control system for all of your rail lines."* MBTA committed to developing and implementing PTC on the Green Line.

28.2 Shortly after my arrival at MBTA in 2011, I reviewed MBTA's efforts to address the NTSB Safety Recommendation, and completed a safety assessment. The safety assessment determined that MBTA's Green Line train to train collision risk to be unacceptable with a major collision probability risk of approximately 1.1 collisions per year. The data showed that since 2008 MBTA continued to have collisions.

28.3 I also determined that MBTA had failed to meet the deadline of the Corrective Action Plan (CAP) timeline, placing it out of compliance with state and federal regulations concerning CAP's. At this stage, MBTA explored a number of alternatives to traditional PTC systems (e.g. CBTC), and reviewed a number of technologies, ultimately deciding between a radio-based train protection system and an inductive-based train protection system.

28.4 The NTSB had rejected a proposal for an alternative PTC technology that used an inductive-based train protection technology, and issued an unacceptable response to the MBTA, which remained in effect until we presented information on a train radio-based technology that we had tested that they felt met the requirements of PTC.

28.5 MBTA issued an RFP to find companies to demonstrate train protection systems. One a inductive-based system, demonstrated by Siemens, and the other a radio-based system, demonstrated by Metrom Rail. A team from operations, maintenance, safety and E&M approved the Metrom Rail radio-based system, to address signal violations, train separation protection, roadway worker work zone protection, speed control, protection against misaligned switches, ROW alerting protection, and train to train protection in stations and a number of other expandable safety features.

28.6 MBTA's GM and senior management formally accepted the radio-based train protection system demonstrated by Metrom Rail, and specifically rejected the inductive-based technology. We presented the radio-based technology to the DPU, who indicated that the NTSB would have to approve it before they would approve a CAP modification. We also presented the radio-based Metrom system to FTA Region 1, and to FTA Office of Transit Safety & Oversight.

28.7 As MBTA's CSO, I contacted the NTSB to inform them and provide details of the radio-based train protection system, and was able to get obtain buy-in and schedule a meeting with the NTSB. DGM Gonneville, Director Cristy, and I met with the NTSB in Washington DC, and presented the radio-based train protection system demonstrated by Metrom Rail. The photographs, descriptions, and results were exclusively based on the Metrom System demonstrated. The NTSB also felt the technology offered a possible alternative solution to PTC.

28.8 The NTSB informed me that a team from Washington DC would visit MBTA, at which point we gave a presentation of the radio-based train protection system to the NTSB team that came to MBTA. The NTSB team included the Chairman of the NTSB, who ultimately provided recommendations to the NTSB Board to change the Unacceptable Response to an Acceptable Response.

28.9 The presentation included photographs and information provided by Metrom, and it contained no information on the inductive coil, camera or radar systems. NTSB provided written notice of the Acceptable Response, and conditioned it upon me as CSO to keep the NTSB informed of the progress and if we encountered any problems or changes. I continued to inform the NTSB of the procurement advances on a regular basis. The NTSB has not been informed of the inductive-based technology with cameras and radar proposed by BBR.

28.10 MBTA received a number of proposals, which a technical team evaluated, and the executive selection committee selected. Two candidates were chosen to perform demonstrations and testing of their systems. The technical specifications were developed by LTK Engineering, who used as its template Metrom's specifications, however they modified the radio specification, which offered a number of performance advantages, which was one of the major reasons why Metrom's product is similar to PTC- CBTC systems.

28.11 Director Culp and Deputy Director Alex Metzger participated with the technical team, and I served on the executive selection committee. The results of the scoring selected the Metrom radio-based system with the highest score, and the BBR inductive coil based-system, with the added features of camera and radar system.

28.12 Director Culp and Deputy Director Metzger felt that the BBR system did not meet the criteria of radio-based system, and definitely was not the technology we had presented to the NTSB and regulators.

28.13 We also felt that the CRRC system proposal to demonstrate a CBTC system as consistent with the intent of the NTSB's PTC safety recommendation, as a similar system had been installed successfully at SEPTA, which ended up being the third choice.

28.14 Although, the office of the CSO objected verbally and in writing to the BBR proposal, we were not able to influence MBTA's decision to go forward with testing of the Metrom and BBR systems.

28.15 Our analysis of the procurement scoring criteria suggested weaknesses in its methods to qualify technically the stronger product, as most of the scoring mechanism were administrative items and only a small percentage was applied to the technological strengths. This severely skewed the scoring substantially, to minimize the stronger more applicable technology.

28.16 When the demonstration and testing of the Metrom and BBR systems were completed, the scoring resulted in Metrom scoring slightly higher than the BBR system. Again, both Director Culp, Deputy Director Metzger and I objected to the score and the scoring system, as it was developed in such a way that the technical aspects of the better product was negated by the administrative aspects of the proposals, and left only a small margin to demonstrate the higher performance aspects of one over the other. We also noted a number of significant failures and noted problems with the performance of the radar and camera systems.

28.17 We also determined that the test results showed that the BBR's radar and camera systems had serious problems in testing and did not perform well. As cameras and radar were systems MBTA had not tested previously, our research suggested a number of serious challenges with the camera and radar technologies.

28.18 Radar systems have a mechanical function and are prone to higher levels of maintenance, calibration, testing and upkeep due to repetitive mechanical action and the high vibration factors of the Green Line.

28.19 We also determined that radar beams can be distorted by a number of factors such as inaccuracy, target size, object identification weaknesses, detection faults, availability, noise, dust, snow, debris and interference.

28.20 To provide train protection or penalty braking to avoid collisions the system needs to have a high reliability function, as false positive and false negatives results or system errors could compromise the train protection system. Our research suggested that radar and camera systems were prone to high levels of false positives, causing an inordinate amount of unnecessary stops.

28.21 The BBR camera system failed to recognize one of the test elements used to detect an object. Our research of this technology suggested that camera-based systems tend to produce a high number of false positives. Part of the problem to the technology is the complexity and variations of light, color, darkness and brilliance and the inability of current computer technology to effectively and consistently interpret the vast array of the light spectrum.

28.22 We presented our objections to the project leaders, and LTK and Fleet Engineering disagreed, seeming to favor the BBR system over the Metrom system.

28.23 Because of this, BBR whose costs were significantly lower, ended up being the successful bid, this greatly concerned the office of the CSO, and I forwarded to the General Counsel a large number of emails asserting our concerns.

28.24 DGM Gonneville became involved, and met with me to discuss the GLTP project. Up to this point, I was not able to talk to DGM Gonneville because I was forbidden to talk to anyone else other than members of the selection committee. DGM Gonneville signed a non-disclosure and said we could now discuss the project.

28.25 He was upset because he agreed that the BBR system was not what we had presented to the NTSB, FTA, and DPU. He also asked me why I had not told him much sooner during the selection process, as he would have been sure to have intervened. I told him I was forbidden by the legal team. He said I should have told him anyways and he would have corrected the problem. He also stated that he did not want to go back to the NTSB "With our tails between our legs". At this point, he asked me to vigorously push back with the selection committee to argue my points of concern.

28.26 In the selection committee meeting, the presenter made negative and incorrect statements concerning the Metrom system, which he was discounting, and the BBR system, which he was promoting. I objected because many things he had said were incorrect, misleading, and false. I also stated that if we go with the BBR systems we would need to inform the DPU, FTA and NTSB and receive their concurrence. The selection committee agreed to examine BBR's options.

28.27 I received criticism and negative comments from the GM Ramirez with respect to the GLTP project, who was not fully informed of the issues, suggesting that I may have a more personal interest. He told me to back off, which was difficult because DGM Gonneville was

pressing me to push back. I explained in general terms the conflict and tried to help alleviate the allegations by explaining that the two systems were very different, and we needed regulatory and NTSB approval of the inductive-coil, camera and radar based technologies.

28.28 MBTA decided to conduct an investigation of me, to see if I had any personal connections or interests with Metrom, and was interviewed by outside counsel. The investigation found no proof to support the allegations.

28.29 The day before the final selection committee meeting Jeff Cook Chief Administrator/Chief of Procurement Officer contacted me indicating he wanted my cooperation, and asked me to conduct myself accordingly without objecting to the project selection. I felt this statement was forcing me to concede my concerns and was meant to keep me silent.

28.30 I would like to point out that CM Cook, GM Ramirez, DGM Gonneville, and Legal Counsel Susan Cobb, and General Counsel Marie Breen, all stated to me that the GLTP procurement project process had been poorly mishandled, and scraping it would only set the GLTP program back further, and constituted an enormous expense that would be lost. They also said we would be facing litigation no matter what decision was ultimately made. It was obvious that MBTA was trying to rectify the mismanagement of the procurement.

28.31 I want to point out that none of the selection committee members were present during the early stages of the first round of demonstrations, and procurement process. Now were any of the original procurement and Fleet Engineering personnel still involved with project due to massive organization turnover.

28.32 I felt that the BBR system was not what we had originally approved during the original demonstration phase, nor what we had informed the DPU, FTA, and NTSB. I felt BBR system posed a number of safety performance risks, and that the Metrom radio-based system and the CRRS CBTC systems were much more viable and acceptable to the NTSB. I also felt that the procurement process was poorly handled by the procurement department, fleet engineering and the consultant, with serious flaws with specifications and technical scoring elements.

28.33 I also felt that there was favor placed towards the BBR system by the consultant and fleet engineering. The consultant pulled extensively from the Metrom specifications, which were

included with the original test demonstration. I also felt that there was a conflict of interest as according to senior management, and my observations the procurement was mishandled, part of which was performed by the consultant. The consultant helped justify the BBR product over the Metrom product, which I felt constituted a conflict.

28.34 DGM Gonneville relies heavily and favors this particular consultant (LTK), over the input the office of the CSO, and other members of management. Another firm prepared a white sheet justifying the BBR system, however I felt the report was biased to meet the objective of justifying the BBR system, and was not reviewed in the context of what was presented to the NTSB, FTA, and DPU.

28.35 I also disagreed with LTK's assertions that the Metrom system was untested as the technology had been used successfully for similar applications in Canada, with Transport Canada declaring and accepting that Metrom's technology was a form of a lower cost PTC system.

28.36 Finally, I also noted that SEPTA had successfully installed PTC – CBTC system on their light rail system, very similar to MBTA's Green Line and were expanding this technology for their entire light rail system. Over the ten years SEPTA in response to MBTA's NTSB Safety Recommendation, successfully applied the PTC – CBTC technology to their light rail system, while MBTA had not.

28.37 Due to the position I had taken to challenge the procurement, I experienced significant criticism, pressure and felt I could no longer object, however I still had serious reservations. I did state at the end that I would agree to the BBR proposal, provided that MBTA inform and present the technology to the DPU, FTA Region, FTA Office of Transit Safety & Oversight, and the NTSB. If they all concurred I would have no further objection.

28.38 Without consulting me, DGM Gonneville, Chris Pacher of LTK, met with GM Poftak, DPU Director Cristy and Acting Regional Administrator Peter Butler met to inform DPU and FTA region of the selection of the BBR system. The meeting only provided a basic overview of the BBR system, and the selection decision. As I listened, I noticed that a number of omissions, misrepresentations, and distortions were made with regards to the BBR systems, and failed to fully

disclose the vast differences in technology, and some of the failure concerns of the radar and camera systems, focusing instead on the success of the inductive coil system.

28.39 Administrator Butler had asked specifically about the camera and radar technologies and if it had been used anywhere else, and LTK failed to mention the problems encountered during testing, and focused instead on the inductive coils reliability, which only solves limited number of the PTC risk factors.

28.40 They also seemed to minimize the successes Metrom product, which had good results in both demonstrations. During the meeting DPU Director Cristy said it would not be necessary to contact the NTSB, which was a reversal of what he had insisted upon in the past.

28.41 I was surprised by Director's Cristy comment, because he was fully aware of the assurances we gave to the NTSB. I contend that Director Cristy is not in a position to speak for the NTSB. It is my opinion that moving forward without fully informing the NTSB, FTA (region, Office of Transit Safety & Oversight) of the technology differences represents a clear breach of the assurance we provided to the NTSB.

29.0 Department of Public Utilities – State Safety Oversight

29.1 I worked directly with John Englander, MassDOT/MBTA General Counsel to address the serious encroachment, inappropriate, and overreach challenges we were having with DPU Director Cristy, and Assistant Director Scott Andrews.

29.2 Counsel Englander advised me that the association between MBTA's and the DPU should be an Arm's-Length Relationship. He explained that MBTA and DPU represent separate entities with distinct legal personalities and functions. John went on to clarify that an arm's length relationship provides assurance to both entities to act in their own respective interests, work together in good faith, and not be subject to or subjected to any undue pressure, unfair dealings or unbecoming dealings from either party. He instructed me to push back on DPU's actions and requests, which breached an arm's length relationship, and to work with DPU to establish proper and clear protocols.

29.3 As instructed by the Counsel Englander, I pushed back and attempted to establish a working agreement with the DPU, explaining the need for an arm's length relationship. Director

Cristy and Assistant Director Andrews did not like this or any challenge to their demands, and tended to not negotiate in good faith, but instead used other means to by-pass an appropriate process. My efforts to create boundaries increased DPU's antagonism against me directly.

29.4 Unfortunately, while I was able to make some progress, the arm's length efforts led to more and more conflict, which Director Cristy and Assistant Director Andrews seemed to take as a personal affront against their demands. Their resentment began to increase and we experienced more and more criticism, resistance, and behind the scenes activities to thwart our efforts.

29.5 From 2011 to about 2015-16 period I had had very good relations with Director Cristy, and for the most part were able to resolve issues and differences. After Assistant Director Andrews retired as an MBTA executive on the Red Line, and started working for the DPU, the dynamic started to change.

29.6 My understanding of an arm's length relationship is to help ensure independence from the other entity, with each having its own sphere of interest. Both parties have equal access to information in order to reach an amicable agreement or resolution. In considering the relationship with DPU, my good faith intention was to establish an arm's length relationship between DPU and MBTA, and to develop and maintain mutual respect, proper discourse, fair negotiations, robust discussion and cordial resolutions. In the many communications I had with the DPU, I tried to ensure a respectable and proper form of conduct. Unfortunately, DPU failed to fully reciprocate and subjected me and my staff to all sorts of aggressive tactics and intimidation. .

29.7 One of the key aspects of the federal regulations, and specified in DPU's Program Standard states:

Legally Independent Agencies: *"The Department [DPU] and the Transportation Authority [MBTA] operate as legally and financially independent agencies."*²⁹

The term legally independent according to Counsel Englander, is in essence an arm's length relationship, and the regulation supports this position.

29 DPU Program Standard Regulation 220 CMR 151, et al

29.8 From 2016 to 2019, DPU initiated its transition from its role under 49 CFR 659 to 49 CFR 674. The new state safety oversight regulation greatly increased DPU's oversight authority, enforcement and responsibilities. DPU initiated more intensive oversight long before DPU received their FTA certification of their new Program Standard, and did so before discussions and agreements with MBTA to understand its new roles, processes and procedures.

29.9 Initially, the increased oversight activities occurred without changes to its Program Standard or agreements, which led to conflicts and misunderstandings between MBTA management, MBTA Safety, and DPU, with ever increasing levels of insinuations, threats and friction. We had received numerous complaints from MBTA management who had become overwhelmed and frustrated by DPU demands, especially in the way that they worked behind the scenes.

29.10 The increase in regulatory oversight activities was expected and not surprising. But what was unexpected was the way that DPU conducted their role. DPU Assistant Director Andrews, and DPU Engineer Richard Dobbins, who had also retired from the MBTA as an executive, were both using their past MBTA relationships to by-pass normal appropriate protocols, and thus the independent arm's length relationship deteriorated. Mike Brock, DPU, and DPU Coordinator Ivana Limlengco had also worked for the MBTA. MBTA management and safety became frustrated as these former employees, were using their connections incongruously.

29.11 On one occasion, when I was trying to work with Assistant Director Andrews to create some protocols, he threatened me directly, stating "That no matter how hard you try, you will never be able to stop me, as my connections are far too deep and wide!" The frustrations reached the point where I contacted the General Counsel, and Rachel Morse was assigned to assist with MBTA Safety – DPU negotiations of the new Program Standard, procedures and protocols, by dealing directly with their counsel who was much more reasonable and practical.

29.12 The following list describes a number of the activities and behaviors that I felt compromised the arm's length relationship, MBTA's safety program, and curtailed the office of the CSO to address safety hazards effectively:

- 29.12.1 Demanding permanent MBTA security passes to enter yards and the main operations building without notice, inhibition, and or escort.
- 29.12.2 Obtaining safety and security sensitive documents through back door means and without formal and or a defined and agreed upon processes or procedures.
- 29.12.3 Using MBTA parking lots for nonofficial duties, daily parking, or personal purposes.
- 29.12.4 Using prior relationships (former MBTA employees) to garner favor, information, reports, documents, or to undermine agreed upon protocols.
- 29.12.5 Using direct, indirect and inadvertent acts of influence, and threats, to undermine and by-pass established communication procedures as described in DPU's Program Standard to address areas of disagreement, or areas of negotiation.
- 29.12.6 Using threats of termination, intimidation and other forms of abuse of authority to undermine the independence, authority of the CSO's responsibilities to investigate accidents, incidents, near misses and hazards in accordance with state, federal and MBTA's safety plans.
- 29.12.7 Dealing through informal and undocumented ways outside of established procedures and protocols of DPU's own Program Standard, and the state and federally accepted MBTA safety plan.
- 29.12.8 Directly, coercively and by undue influence exert pressure on the office of the CSO to alter, suppress, change, omit, or limit official safety investigation findings, causes, systemic issues, safety recommendations, mitigation and corrective actions
- 29.12.9 Severely limit the CSO, and office of the CSO to work with management to issue Corrective Action Plans (CAP)³⁰ to address serious safety

30 **Corrective Action Plan (CAP).** A plan developed by the Rail Transit Agency that describes the action the Rail Transit Agency will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for implementing those actions. The State Safety Oversight Agency or FTA may require a Rail Transit Agency to

concerns as described in the Program Standard. In a meeting with MBTA Management, MBTA Safety and the DPU, Assistant Director Andrews and Director Cristy, both indicated that they preferred very few Corrective Action Plans.

29.12.10 Andrews explained that fewer CAP's meant less FTA scrutiny, especially CAP's that stay open a long time. These statements by the DPU in front of senior management, significantly impacted MBTA Safety's ability to address unacceptable and undesirable hazards, issues of non-compliance, and pitted management against MBTA Safety for recommending the development of a corrective action plans. Consequentially the number of CAP's dropped off dramatically, as did the number of hazards that became more challenging to address.

29.12.11 DPU requested complete and unfetter access to all MBTA electronic files from all departments, asking for remote carte blanche access to all of MBTA's electronic operations, capital delivery and safety data and document systems.

29.12.12 As a result of DPU's antics against me, MBTA management verbally criticized me for using of CAP's to address unacceptable and undesirable safety risk, leaving management to think that I was the reason we had prepared CAP's in the first place as DPU preferred we not develop CAP's.

29.12.13 It is important to understand that a CAP increases the regulatory accountability for MBTA to address safety concerns, and without the regulatory oversight, hazards become more difficult to correct and it becomes increasingly difficult to mitigate risks.

29.12.14 MBTA has a history of not addressing safety risks or CAP's in a timely or serious matter unless compelled. The NTSB PTC Safety Recommendation is a case in point, issued in 2009, and ten years later MBTA is still struggling to address it.

Without the regulatory means towards greater compulsion to prioritize safety critical risks, it seriously exposes passengers, employees, and public to greater risk and harm.

29.12.15 Standard protocols with other regulatory agencies, such as OSHA, provide prior notice of their intent to conduct an audit, inspection, investigation, document review or other request. In cases of an unannounced visit, OSHA notifies the location and allows one hour to have a company representative available, usually a safety officer present. For instance, when the FRA arrives unannounced on-site, they identify themselves and in the event they discover a defect they will verbally discuss it at the time, and follow up with a with a written defect report designating the level of response, remediation or penalty.

29.12.16 Regulators open their activities with a briefing as to their purpose, intent and scope of their regulatory activity. The regulator then performs its duties based on established procedures, will have a close out meeting detailing concerns, and then provides a written report within a prescribed timeline. DPU conducts various types of regulatory oversight activities and rarely does the DPU provide a report of their findings or concerns.

30.0 Annual FTA Joint Safety and SSO Meeting:

30.1 In September or October, 2018 MBTA Director Culp, Director Durso and I attended the annual joint meeting with the FTA, other transit safety officers and state safety oversight agency officials to learn about and discuss FTA's new federal safety program.

30.2 During one session, with transit agency safety officers, the FTA allowed for open discussions to discuss challenges or problems with the new regulations and concerns agencies were having dealing with SSO's.

30.3 A number of safety officials expressed fear that by stating their concerns that if SSO's found out what safety officers expressed in frustration with SSO's, they feared retribution as tensions between SSO's and transit agencies were extremely high. FTA representatives provided assurances and encouraged open discussion.

- 30.4** I decided to ask for clarification of a letter FTA had written in, I believe January 2015 or 2016, cautioning transit agencies with respect to Safety Management Systems (SMS) against using consultants (ISO consultants) who were promoting the development of SMS that were not reflective of FTA's safety program.
- 30.5** During that time, MBTA Safety had developed a safety plan compliant with 49 CFR 659 that as correlated and included with FTA's Framework and SMS principles, concepts and tools from ICAO.³¹
- 30.6** ICAO's publically available SMS standard is the only SMS standard available for a transportation type systems, as other programs were developed for occupational health and safety, or oil & gas, military, nuclear or chemical industries and were different from what FTA was proposing. The ICAO model looked identical to concepts FTA had expressed.
- 30.7** FTA messages and guidance pulled from many concepts from ICAO, and the Transportation Safety Institute (TSI), referenced many aspects of the ICAO program in their training modules.
- 30.8** As MBTA is such a complex agency that takes inordinate amount of effort and time to transform, we decided to introduce the SMS concepts within its safety plan. The document was approved by MBTA management, and different transit agencies around the country were doing the same thing. The safety plan was completely compliant with 49 CFR 659 and 220 CMR 151, and provided an instructive correlation of the one SSPP safety program in relation to SMS.
- 30.9** DPU at that time rejected MBTA's approach and safety plan, using the letter as their justification. MBTA recalled the safety plan, hoping to use it in the future to help transition MBTA. DPU also argued that we had plagiarized ICAO SMS standard, even though we explained that ICAO's template was available to the public to use directly. Our office had confirmed permission to use the ICAO's template and SMS concepts.
- 30.10** After the FTA conclude the open discussion meeting, Mike Coplen, FTA's Chief of Safety Policies & Promotion approached me, asking that I write to him with my question, as he agreed there was confusion over the letter.

³¹ ICAO: International Civil Aviation Organization:

- 30.11** I wrote the letter to FTA Chief Coplen as requested, and sometime in December 2018 to January 2019, I received a call from the FTA to discuss my concerns. I do not recall the name of the participants from the FTA as I do not have my calendar or meeting notes, but I believe it may have been led by Candace Key, Acting Director - Office of System Safety. Director Durso from my office participated and possibly Director Culp attended.
- 30.12** We explained the dilemma we were facing in developing the PTASP safety plan without SMS guidance, as DPU had demanded we complete the PTASP safety plan by July 2019, and we wanted to use the ICAO standard as a guidance, which DPU had prohibited we use.
- 30.13** We also explained that we had contacted Chicago Transit Authority (CTA) as requested by DPU, who had worked with FTA to develop a pilot SMS program. CTA stated they had problems developing the program, and had contacted United Airlines receive guidance.
- 30.14** Finally, we indicated that 49 CFR 673 only provided a basic regulatory framework, which allowed agencies the flexibility to develop their own SMS safety programs they found most beneficial to their property.
- 30.15** DPU had become prescriptive and demanding, causing problems in maintaining an arm's length relationship. I also felt that DPU was overextending their authority and demands that I thought were overly unrealistic, and unreasonable.
- 30.16** FTA agreed with our position that the letter did not restrict MBTA from using the ICAO SMS as a guide in the development of its PTASP safety plan. They also agreed that DPU's demands and regulation for compelling MBTA to complete PTASP by July 2019, as unrealistic.
- 30.17** The FTA acting director then indicated she would contact Director Cristy, to provide clarification on the letter and the deadline. I immediately asked FTA if we could deal with DPU directly ourselves with their clarification as I knew DPU would react negatively against me, and felt they would retaliate in some way. I expressed my concerns to the director. She said not to worry, as she would contact DPU to help resolve the issues and provide clarification. When the call ended, I said to Director Durso that I thought DPU was going to retaliate in some way, she said "I know they will retaliate."

30.18 Within a day or two of our meeting with the FTA, Director Cristy sent me a curt and accusatory email to me directly, and Cc'd DGM Gonneville, which I knew would create a strong negative impression on DGM Gonneville. Director Cristy was obviously very angry and I feared retribution or retaliation, and felt DGM Gonneville might take action against me.

30.19 I was also deeply concerned because in Director Cristy's email, he was aware of the length of time with the FTA (50 minutes). I had known that Assistant Director Andrews had a former MBTA colleague, who he had contacted before. I do not recall his name, but I know Assistant Director contacted him before to get the inside scoop. I felt this was a breach of proper protocol as we had spoken to FTA in response to a follow up, and knowing the length of time was disconcerting to say the least infringing on the confidentiality of the call.

30.20 I tried to call DGM Gonneville to explain the context, but he did not take my calls. I did provide an email response to Director Cristy with a CC to DGM Gonneville, but neither DGM Gonneville nor Director Cristy responded in any fashion. I also tried to talk to Director Cristy about it, but he and Assistant Director Andrews had taken a retaliatory posture and from that day onward I felt my job was in jeopardy.

31.0 Commuter Rail Safety Critical Concerns

31.1 During the 7 1/2 years I was able to establish the role of the CSO as defined within the commuter rail safety plan, and the service agreement under section safety. I also reviewed, accepted and approved Keolis' safety documents as part of the 2014 New Start FRA process, when MBTA became the railroad of record and held the ultimate responsibility for safety oversight.

31.2 I had also received full endorsement by Richard Davey MassDOT Secretary, Acting GM Davis, and Scott Darling, who provided GM executive support. From that time forward I have worked actively as the CSO over MBTA's commuter rail safety program. As CSO, I approved Keolis' safety programs and safety plans, including MBTA's s commuter rail plan, and Keolis' safety compliance plan.

31.3 Ryan Coholan became Chief Railroad Officer (CRO) in May of 2014. He manages the Railroad Operations (RRO) department, and oversees the MBTA – Keolis commuter rail operating service agreement.

- 31.4** The CRO controls the budget to pay for additional costs, services, expenditures, purchases that fall outside of the service agreement within his limited budget. Keolis operates and maintains the commuter rail system, and is limited to the operating budget proposed and accepted by MBTA as included in the original contract. MBTA is the owner of commuter rail assets, equipment, buildings, leases and land. MBTA determines and is responsible for capital and asset projects, acquisitions, improvements, rehabilitation, overhauls, renovations and other restorations.
- 31.5** Due to budget restraints and competing costs the CRO tends to place operational and budget restraint interests over safety recommendations, safety advisories or safety improvements. As CSO, I have observed numerous instances where Keolis, the office of the CSO, NTSB, and the FRA have made safety recommendations, which have been ignored, rejected or delayed.
- 31.6** MBTA's capital improvement program also places limitations on MBTA's ability to effectively address safety critical capital concerns, state of good repair and pertinent hazards and safety risks. MBTA has limited ability and capability to promptly address imminent and unacceptable safety risks (e.g. sleep apnea, inward facing cameras, RWP worker warning/protection systems, grade crossing pedestrian safety treatments, and station conditions, etc.), due to limited funds, conflicting priorities, and organization limitations.
- 31.7** Keolis also has limitations due to contract restrictions, cost, limited control other than maintenance over assets, and introducing new safety technologies, safety processes (Sleep Apnea), and safety initiatives as they need approval and funding from RRO's and MBTA. Between the limitations of RRO's, MBTA, and Keolis commuter rail risks cannot be proactively addressed as other commuter rail systems.
- 31.8** In 2014, I informed MBTA senior management of the Operation Deep Dive Metro-North Commuter Railroad Safety Assessment, as many of the findings were similar to the safety issues of MBTA's commuter rail.

31.9 Additionally, I also informed management of the NTSB investigations of the New Jersey Transit and the Long Island Railroad station collisions³², detailing the criticisms of their respective commuter rail safety programs in its ability to elevate and address critical safety hazards.

31.10 Based on my experience, observations and investigations of MBTA's commuter rail system I noted the following safety hazards and risks, and am willing to provide further details and information as requested:

31.10.1 Overemphasis of on-time performance to the detriment of safe

operations and adequate maintenance of the infrastructure, equipment and systems

31.10.2 Ineffectual ability to prioritize and address imminent, unacceptable, undesirable, systemic, operational, or organizational hazards, safety risks, and other safety perils identified through investigations, observations, safety recommendations, and other means.

31.10.3 Major weaknesses and failures to perform qualitative testing and observations of operating crews, RWP crews, and other safety performance measurements and safety assurances of safety critical maintenance, repairs and inspections

31.10.4 Major deficiencies to proactively address significant state of good repair of safety critical systems, subsystems, equipment, and other critical infrastructure, equipment, assets and systems. (E.g. Winchester Station, Station Platform Collapse w/ passenger injuries, automatic defect detectors "i.e. hotboxes", etc.)

31.10.5 Reluctance and inability due the lack of contingency funds to promptly respond to FRA Safety Advisories, NTSB Safety Recommendations, new safety technologies, or other industry safety recommendations.

31.10.6 Systemic and organizational weaknesses to effectively review, approve and implement new safety systems, safety technologies, safety enhancements or safety capabilities to address serious safety concerns in a timely, proactive, expeditious and

³² NTSB Investigation Reports: RAB 1801, RAB 1802

efficient manner. (E.g. RWP alert/protection systems, inward facing cameras, sleep apnea program, dispatch control systems, etc.)

31.11 Commuter Rail Safety Critical Safety Risks:

31.11.1 On November 27, 2018, Train 404 derailed when a wheel bearing failed causing it to detach from the coach. DGM Gonneville assigned CRO Coholan to be the lead investigator, which is a violation of MBTA's commuter rail safety program. In the past, Keolis Safety in collaboration with affected Keolis departments, MBTA Safety and RRO's investigated the matter collaboratively.

31.11.2 Normally, the office of the CSO will conduct a parallel investigation to examine safety risks and hazards separately from Keolis, as MBTA is the owner of the assets, and responsible for keeping assets in a state of good repair for systems or components are no longer viable due to failure, life cycle obsolesce, and/or unrepairable condition.

31.11.3 DGM Gonneville had assigned CRO Coholan to be the lead investigator of an uncoupling event October 10, 2018, and an uncoupling event September 2017. I firmly believe, can attest and based on conversations with DGM Gonneville and CRO Coholan that their intent is to limit, omit, or filter safety hazards and risks from investigations.

31.11.4 While departments normally investigate in collaboration with safety, safety's role is to independently identify, examine, analyze and to determine the severity and probability of hazards, risks, systemic and organization factors. With the DGM's decision to have CRO Coholan investigate it seriously hampers the CSO's authority and responsibility.

31.11.5 Although, DGM Gonneville did not want safety to conduct an independent investigation and provide an independent safety report as the official investigation, I investigated the wheel off derailment.

31.11.6 Bearings, especially the design of the coach in question, are prone to catastrophic bearing failure from a number of causes, with the wheels coming off due to high temperatures that melt that axle to failure.

31.11.7 Railroads mitigate this risk by using wayside or onboard technologies or hot bearing detectors (hotboxes) and/or other sensory tools or equipment to monitor bearing temperatures and bearing performance.

31.11.8 MBTA's commuter rail south has a hot bearing detector, however the north-side did not, as its hotbox had become unserviceable years before hand. This constitutes a possible unacceptable SGR hazard risk, as MBTA has rolling stock equipment susceptible to bearing failure without the hotbox.

31.11.9 I was actively investigating the wheel-off derailment up to the time of my termination.

31.12 FRA Safety Advisories: During the years from 2014 to 2019, the FRA issued five (5) safety advisories, which required Keolis, RRO's, CSO and the MBTA to review and address, if applicable hazards were noted on MBTA's commuter rail system.

31.13 MBTA and Keolis demonstrated weaknesses, reluctance and an overall inability to effectively and appropriately respond to FRA Safety Advisories due to a number of factors previously described.

31.14 I reference the following FRA Safety Advisories, as examples of these deficiencies:

31.14.1 SA 2016-03 "Mitigation and Investigation of Passenger Rail

Human Factors Related Accidents and Operations in Terminal and Stations with Stub End Tracks." MBTA CR suffered a train to bunter (bumping post) collision similar to the New Jersey Transit and Long Island Railroad station collisions, where an Keolis engineer struck the bunters, and failed to report the collision, only to be discovered later during revenue operations, when damaged components on the cab end created scraping sounds emanating from damages components.

MBTA safety investigated the incident, completed inspections of the North and South Stations and issued a Corrective Action Notification to Keolis. We also provided our report with safety recommendations to RRO's for review and

consideration. The FRA Safety Advisory recommended the follows

recommendations:

- 1. Sleep Apnea Screening:** One of the more significant safety recommendations involved fatigue, circadian rhythm sleep disorders, and sleep apnea safety risks, recorded as an NTSB Safety Recommendation R18-004. Keolis concurred with NTSB's safety recommendation and provided its endorsement to proceed with a sleep apnea program that would cost approximately \$500,000 for the first year.
 - a.** In speaking to the CRO regarding the Keolis recommendation, he stated, "I would rather spend that money on a new train, if it's not mandated then we do not have to do it." I explained a safety advisory is voluntary, but we have an obligation under the CR safety program to address safety risks. I also stated that other properties have implemented the Sleep Apnea screening programs.
 - b.** CRO Coholan argued that Keolis should be responsible, which I agreed, only the CRO's fear was that since it was not described in the original service agreement he would have to pay from his budget.
 - c.** We spoke to Dave Scorey GM of Keolis stating that we felt it was there responsibility to pay for and administer the sleep apnea program for its employees.
 - d.** Keolis' position was that MBTA needed to pick up the cost as it was not included as part of the original operating agreement budget.
 - e.** GM Scorey, asked that we provide him a letter of our position. CRO Coholan wanted me to draft the letter, however I did not feel that as CSO, I should draft such a letter as in my opinion, the sleep apnea concern was an attributable risk to MBTA's commuter rail operation.
 - f.** I referred the question and letter request to MBTA's Chief Counsel to review and address.
 - g.** A few weeks before my termination, Administrator Fiorenzo asked about what MBTA and Keolis was doing to address the sleep apnea

safety risk, and I responded that we had not concluded the review, and that legal would review the issues and who would be responsible for the program.

- h.** The CRO Coholan called me the next day in an upset fashion, stated, “Why did you talk to Les, about this?” I informed CRO Coholan that I had been asked a direct question by Les, and answered him appropriately.
- i.** CRO Coholan accused me of opening my mouth when I shouldn’t have. I strongly believe that CRO Coholan complained to DGM Gonneville, who started limiting Keolis’ and my investigation authority and gave it to CRO Coholan, and also wanted to limit my discussion with the FRA.
- j.** At the time of my termination, the sleep apnea issue had not been resolved and addressed, and continues to pose a safety risk.

2. Inward-and-Outward Facing Cameras: As early as 2004, the NTSB and the FRA have promoted the installation of inward-and-outward facing cameras, and with the safety advisory, and a recent admonition to accelerate the program.

- a.** MBTA’s CRO informed the FRA that most of MBTA’s CR equipment has outward facing cameras and indicated the plan to complete the installations.
- b.** With respect to the inward facing cameras he indicated that MBTA would install the inward cameras as part of the locomotive overhaul program.
- c.** Although attempts were made to work with RRO’s to accelerate the installation of inward facing cameras, I was not successful, as RRO’s preferred to waiting for the overhauls.
- d.** The current strategy will require a number of years to address the inward camera recommendation, and thus increases MBTA’s risk substantially to unacceptable levels.

- e. Safety data, investigations, monitoring and observations indicated a high number of human factor errors and omissions in operating rule and procedure compliance leading to derailments, train-to-train collisions, collisions with object/equipment, signal violations, operating violations, door incidents (conductor leg amputation), and near misses.
- f. Engineers and crewmembers have been observed in distracted behavior of eating, packing bags, talking, opening umbrellas, and other unsafe distractions.
- g. Safety audits and review of observation and testing activities found inconsistencies and weaknesses in approach, quality, and locations or operating conditions (nighttime, yards, high risk locations).
- h. Based on the aforementioned safety critical concerns derived from human factors, and the other safety concerns raised by the safety advisory, MBTA's current strategy to install inward facing cameras is unacceptable, and should expedite the inward camera installation to mitigate the risk.

31.14.2

SA: 2016-02 *"Identification and Mitigation of Hazards through*

Recognition Job Safety Briefings and Hazard Recognition Strategies." The GLX RWP safety audit that I performed just before my termination, revealed substantial violations with 49 CFR 214, OSHA, and SA 2016-02. The safety advisory includes the contractor's responsibility to implement policies and procedures mandated by OSHA and the FRA to improve roadway worker safety. The advisory includes the contractor's obligation to adequately identify, eliminate or control safety hazards and risks, and to ensure robust and clear communicated job safety briefings. Additionally, it called for contract employees to have the absolute right and encouragement to issue good faith safety challenges. During my safety audit of the GLX project I confirmed that GLX Constructors, Keolis, and MBTA personnel failed to conduct a job hazard

analysis, effective safety briefing and a general failure to issue a good faith safety challenges.

31.14.3 SA 2015-04: Ballast Defect and Conditions – *“Importance of Identification and Repair in Preventing Development of Unsafe Condition of Track Conditions.”* During the GLX project commuter rail track realignment task, my inspection revealed major failures by the GLX Constructors and Keolis to identify and correct ballast defects, especially in relation to the track curve next to the bridge abutment. The safety advisory calls for robust identification and remediation efforts to address ballast defects in a timely fashion, and to ensure adequate oversight of unsafe ballast conditions, especially to ensure gage integrity from dynamic centrifugal and lateral wheel-loads on curves.

31.14.4 SA 2015-03 – *“Operational and signal modifications for compliance with maximum authorized passenger train speeds and other speed restrictions.”* I issued a CAP Notification, and worked with Keolis to address the various items listed. Keolis identified a number of curves where there exists a speed reduction of more than 20 MPH.

1. Keolis was able to address a number of the items, however MBTA was not able to address the recommendation related to the ATC or other system technologies to provide warning and enforcement of speed limits.
2. Keolis presented a number of recommendations, including testing a transponder system, which I tried to advance with RRO’s, and MBTA. However, due to an ineffective organizational process and funding mechanism to address safety concerns, nor the ability to advance safety recommendation technical review, evaluation, safety cost analysis, and approval, it is very difficult to address safety recommendations.
3. RRO’s decided to address the safety recommendations with administrative rules, rather than using the technology. Safety audits by my office confirmed serious

deficiencies in a number of rule compliance protocols, including using a second qualified crewmember to remind engineers of high-risk curves.

4. A number of other commuter rail systems also applied similar technical strategies to what Keolis and MBTA Safety tested, however MBTA chose not to explore or address the safety risk with technology.

31.14.5 SA 2014-02 “Roadway Worker Authority Limits – Importance of

Clear Communication, Compliance with Applicable Rules and Procedures, and

Ensuring that Appropriate Safety Redundancies Are in Place in the Event of

Miscommunication or Error.” Keolis Safety and the office of the MBTA CSO

participated in review of the recommendations contained in the safety advisory to determine appropriate mitigations.

1. Keolis had reported a number of dispatching violations, errors and incidents exposing work crews and equipment to collisions. Safety audits performed by me personally determined serious weaknesses in Keolis’ RWP program, track authority, training, and monitoring activities.
2. Keolis’ observation and testing program exhibited weaknesses in consistency, practices, and training/mentoring by foreman performing the tests. The safety issues identified during the GLX RWP safety audit that I conducted, demonstrated similar deficiencies to those identified in the safety advisory, indicating a major safety risk to employees and workers.
3. In 2015, Metro-North developed an electronic technology that would provide work zone redundancy protection to roadway workers, by issuing a code that the EIC received electronically that protects against errors by dispatchers. The technology proved to be very successful. Metro-North provided details, steps taken, costs, results, and safety benefits. Although, the technology offered major safety benefits, I was not able to progress the initiative due to CRO resistance due

to budget restraints and inability to advance the recommendations due to organizational and systemic limitations.

32.0 Other Safety Critical Risks:

32.1 Malden Bus vs. Pedestrian Accidents: Just before my termination, I investigated a series of bus versus pedestrian collisions at Malden Center Station, and Dudley Station. Two of the pedestrian accidents occurred within a short time of each other at the same intersection close to Malden Center Station.

1. I met with the bus trainer responsible for the initial investigation, and met with MBTA personnel at the accident location. After completing my site inspection and interviews I determined a high risk unacceptable hazard for the left turn through the intersection.
2. I also met with MBTA claims, bus operations, scheduling, training and City of Malden officials, including city councilpersons and the chief of police and reached consensus and a acceptance of a number of safety improvements.
3. Due to the severity and probability of the safety risks, I issued a Safety Advisory to bus operations, with verbal notice to the City of Malden. After meetings with the City of Malden officials, we were able to agree on intersection configuration, light timing, and bus operation changes to enhance safety and reduce the high risk unacceptable ranking.

32.2 Dudley Station Bus vs. Pedestrian Collision: MBTA also experienced a bus versus pedestrian collision at Dudley station about the same time as the Malden bus accidents. I notified bus operations and met with senior management from bus operations and training.

1. My investigation and site observations determined that bus operators were turning into the station incorrectly, by making a shallow instead of a 90 degree turn further into the station entry point rather than cutting the corner. These findings were consistent with MBTA safety data that showed a trend of collision due to improper turning techniques. Bus operations agreed with this finding.
2. I also determined that the light transition from daylight into the station posed a safety risk, as the light condition in the station was minimal. When bus drivers enter their eyes will not see

passenger or pedestrians. A number of safety recommendations were made and within the week I was terminated and not able to complete the investigation of follow up on safety improvements.

32.3 Facility Inspections – Serious Safety Concerns: As CSO, I personally attended and conducted with a team from my office, management and labor, comprehensive safety inspections and assessments of the Quincy, Lynn and Everett repair shops. The inspections confirmed a substantial number of major safety critical and poor state of good repair safety hazards, risks, and other safety concerns as detailed in the inspection reports. I was in the process of finalizing the safety recommendations and inspection reports when I was terminated.

32.4 Retaliation Safety Initiative: For two to three years, as CSO I had been working with legal to help establish measures to strengthen and improve protection against retaliation for employees reporting safety concerns.

1. Over my 7 ½ years, employees regularly and consistently reported instances of retribution and retaliation after reporting safety concerns or hazards. MBTA's meets the criteria of a hostile and retaliatory work environment, including incidents of employees reporting safety concerns.
2. FTA's SMS and OSHA focus is to encourage employees to report safety concerns without fear of retribution. I felt that the antagonistic work culture, would severely impair a Just Safety Culture approach to handling safety concerns.
3. I worked closely with Rachel Morse Assistant Chief Counsel to improve language, focus and protection for employees to report safety concerns. Rachel referenced existing MBTA policies and state laws and regulations that provide protection. With Rachel guidance the office of Chief Safety Officer, began announce and inform employees of the confidentiality and anti-retaliation protections they were afforded.
4. The office of the Chief Safety Officer saw an immediate uptick in safety hotline, safety notifications and direct calls from employees reporting safety concerns. I was terminated in the midst of a number investigations for employee reports on the Green line track workers, Wellington Carhouse, Orient Height Carhouse, power department employees, Keolis employees, and a number of requests to meet with union leaders asking that management not

be present. I was in the process of scheduling these meetings with union representatives when I was terminated.

I, Ronald William Nickle, declare my statement to be true and correct to the best of my knowledge and recollection, and so declare it under penalty of perjury, under the laws of the United States of America and the laws of the Commonwealth of Massachusetts.

Ronald W. Nickle

Penny R.

Nickle

Electronic Signature
Dated: May 1, 2019
South Weymouth, MA

Electronic Signature
Witness – Dated May 1, 2019
South Weymouth, MA